1989
ALBERTA HOUSE COST COMPARISON STUDY

Single Detached Dwelling

Alberta
MUNICIPAL AFFAIRS
Housing Division

1989 ALBERTA HOUSE COST COMPARISON STUDY

SINGLE - DETACHED DWELLING

SEPTEMBER 1989

Prepared by :

Helyar & Associates
#200, 14727 - 87 Avenue
Edmonton, Alberta
T5R 4E5

Prepared for :

Alberta Municipal Affairs
Housing Division
Research and Development Section
16th Floor, City Centre
10155 - 102 Street
Edmonton, Alberta
T5J 4L4

ISSN 0822-3904

TABLE OF CONTENTS

Page No.

PREFACE 1

1.0 INTRODUCTION 2
- 1.1 Objectives..3
- 1.2 Scope of Work...3
- 1.3 Drawings..5
- 1.4 Approach..5

2.0 SUMMARY OF FINDINGS FOR THE SINGLE - DETACHED DWELLING 7
- SD.1 Total Building Costs...8
- SD.2 Comparative Costs Ratios...9
- SD.3 Comparative Costs Table 1988-1989...10
- SD.4 Comparative Costs Bar Chart 1988-1989.......................................11
- SD.5 Comparative Total Building Costs 1981-1989 (nom. dollars)...................12
- SD.6 Comparative Total Building Costs Graphs 1981-1989 (nom. dollars)............13
- SD.7 Comparative Total Building Costs 1981-1989 (infl. adj.).....................15
- SD.8 Comparative Total Building Costs Graphs 1981-1989 (infl. adj.)..............16
- SD.9 Comparative Costs per Square Foot of Gross Floor Area 1981-1989 (nom. dollars).18
- SD.10 Comparative Costs per Square Foot of Gross Floor Area 1981-1989 (infl. adj.)...19
- SD.11 Trade Division Cost Summaries...20

3.0 COMMENTARY...22
- 3.1 General..23
- 3.2 Highlights by Centre...25

4.0 DETAILED COST ESTIMATES BY TRADE DIVISION FOR EACH CENTRE.......................30

APPENDIX: Reduced Drawings: Single-Detached Dwelling

PREFACE

The main purpose of the 1989 Alberta House Cost Comparison Study was to provide estimates of the hard construction costs of a prototypical single-detached dwelling and a 24 unit walk-up apartment in ten urban centres in this Province.

The study also compared 1989 residential construction costs with those of previous years in the selected urban centres. Most emphasis was given to a comparison of 1989 with 1988 costs and the study included an analysis of these differences.

The 1989 study was carried out by Helyar & Associates and is documented in three reports:

1989 Alberta House Cost Comparison Study : Executive Summary
1989 Alberta House Cost Comparison Study : Single-Detached Dwelling
1989 Alberta House Cost Comparison Study : Walk-Up Apartment

Additional copies of any of these reports can be ordered from :

ALBERTA MUNICIPAL AFFAIRS
Housing Division
Research and Development Section
16th Floor, City Centre
10155 - 102 Street
Edmonton, Alberta
T5J 4L4

1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Objectives

The objectives of the 1989 Alberta House Cost Comparison Study were:

1. To determine 1989 hard residential construction costs in selected urban centres in Alberta.
2. To determine reasons for differences in residential construction costs in the selected centres.
3. To carry out detailed comparisons of 1989 residential construction costs with 1988 residential construction costs in the selected centres.
4. To determine and comment on residential construction cost trends over the last nine years in the selected centres.

1.2 Scope of Work

The 1989 Alberta House Cost Comparison Study examined the construction costs of a typical single-detached dwelling and a 24 unit walk-up apartment building.

The study has been documented in three reports : an Executive Summary, a report on a typical single-detached dwelling and a report on a walk-up apartment. This report deals with the single-detached dwelling.

The study examined building construction costs in the following centres:

1. Edmonton
2. Calgary
3. Red Deer
4. Fort McMurray
5. Grande Prairie
6. Hinton
7. Lethbridge
8. Medicine Hat
9. Lloydminster
10. Peace River

1.0 INTRODUCTION

1.2 Scope of Work (continued)

The cost analysis of both the single-detached dwelling and the walk-up apartment examined the building construction cost differences between each of the centres and identified the reasons for those differences with reference to such factors as :

a) material costs,
b) labour costs,
c) building features and inclusions,
d) construction specifications and standards and
e) other factors as appropriate.

The cost estimates of the single-detached dwelling for each centre include all structural, finishing, mechanical and electrical work as shown on the drawings and included in the specifications and also include allowances for site overhead. The cost estimate excludes the following items :

a) cost of land and site clearance,
b) site servicing costs,
c) site development costs,
d) design fees and expenses,
e) legal fees and expenses,
f) marketing and real estate financing costs,
g) appliances (fridge and stove) and
h) general contractors' overhead and profit.

1.0 INTRODUCTION

1.3 Drawings

The drawings used in the study for the single-detached dwelling include :

1) Basement/Foundation plan & Main/Upper floor plan
2) Building elevations
3) Building sections & specifications

Reduced copies of these drawings are included in the Appendix.

1.4 Approach

The building construction costs are detailed in the report under the headings of labour and material/equipment costs. Labour rates used in the report are either those established by the trade union concerned, or by the market where trade union rates do not apply. In most cases, a realistic assessment of labour rates has been established by examining the circumstances of the particular sub-trade within the building industry. Material prices have been evaluated from building materials suppliers' lists. Average discounts are applied in order to establish a realistic market price for the materials to contractors.

Prior to 1988, the single-detached dwelling studied had been a bungalow of 100m2 (1,076 S.F.). In 1988, this was updated to a four level split dwelling of 151m2 (1,625 S.F.) finished on three levels and complete with attached double garage to better represent current housing construction trends.

Previous years costs were revised to reflect this change and to maintain the trend of previous years studies.

1.4 Approach (continued)

The cost data are assembled by sub-trade and presented in 21 trade categories plus a category for site overhead. The sub-trade operations are combined within each trade category in order to reflect current estimating practice within the industry.

A computer program was developed in order to collate and present the cost data which were assembled for the ten centres. The quantities and trade descriptions were initially established for the prototypical house and apartment building. The cost data applicable to the relevant quantities and trade descriptions for each centre were then processed by computer.

The cost effects of market forces and building industry conditions are addressed in the 'Commentary' section of this report.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 1 : Total Building Costs

ITEM	EDMONTON		CALGARY		RED DEER		FORT McMURRAY		GRANDE PRAIRIE		HINTON		LETHBRIDGE		MEDICINE HAT		LLOYDMINSTER		PEACE RIVER	
ELEMENT	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%	TOTAL $	%
Labour	22,264	29.1	23,993	29.6	23,826	29.5	25,307	28.8	24,131	28.5	24,865	30.1	22,550	28.1	22,762	28.1	20,876	26.4	24,604	28.8
Material	54,318	70.9	57,084	70.4	56,984	70.5	62,589	71.2	60,402	71.5	57,816	69.9	57,777	71.9	58,184	71.9	58,096	73.6	60,774	71.2
Total 1989	76,582	100.0	81,077	100.0	80,810	100.0	87,896	100.0	84,533	100.0	82,681	100.0	80,327	100.0	80,946	100.0	78,972	100.0	85,378	100.0
Cost per m2	$507.17		$536.93		$535.17		$582.09		$559.82		$547.56		$531.97		$536.07		$522.99		$565.42	
Cost per SF	$47.12		$49.88		$49.72		$54.08		$52.01		$50.87		$49.42		$49.80		$48.59		$52.53	
Cost per SF 1988	$44.09		$47.28		$46.61		$52.38		$49.87		$48.32		$46.78		$46.90		$47.01		$50.50	
Total 1988	$71,666		$76,851		$75,754		$85,137		$81,050		$78,542		$76,031		$76,232		$76,401		$82,080	
Changes From 1988	6.9%		5.5%		6.7%		3.2%		4.3%		5.3%		5.7%		6.2%		3.4%		4.0%	

Note : Several total figures may appear in this report as not being added correctly. This is due to the rounding effect in the calculations of the detail costing for each centre.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 2 : Comparative Costs Ratios *

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
EDMONTON	1.00	1.06	1.06	1.15	1.10	1.08	1.05	1.06	1.03	1.11
CALGARY	0.94	1.00	1.00	1.08	1.04	1.02	0.99	1.00	0.97	1.05
RED DEER	0.95	1.00	1.00	1.09	1.05	1.02	0.99	1.00	0.98	1.06
FORT McMURRAY	0.87	0.92	0.92	1.00	0.96	0.94	0.91	0.92	0.90	0.97
GRANDE PRAIRIE	0.91	0.96	0.96	1.04	1.00	0.98	0.95	0.96	0.93	1.01
HINTON	0.93	0.98	0.98	1.06	1.03	1.00	0.97	0.98	0.96	1.03
LETHBRIDGE	0.95	1.01	1.01	1.09	1.05	1.03	1.00	1.01	0.98	1.06
MEDICINE HAT	0.95	1.00	1.00	1.09	1.04	1.02	0.99	1.00	0.98	1.05
LLOYD-MINSTER	0.97	1.03	1.02	1.11	1.07	1.05	1.02	1.02	1.00	1.08
PEACE RIVER	0.90	0.95	0.95	1.03	0.99	0.97	0.94	0.95	0.92	1.00

* Entries refer to the ratio of the price for a city in the top row of the table divided by a price for the city listed in the column. For example, Red Deer costs are 1.06 times Edmonton costs.

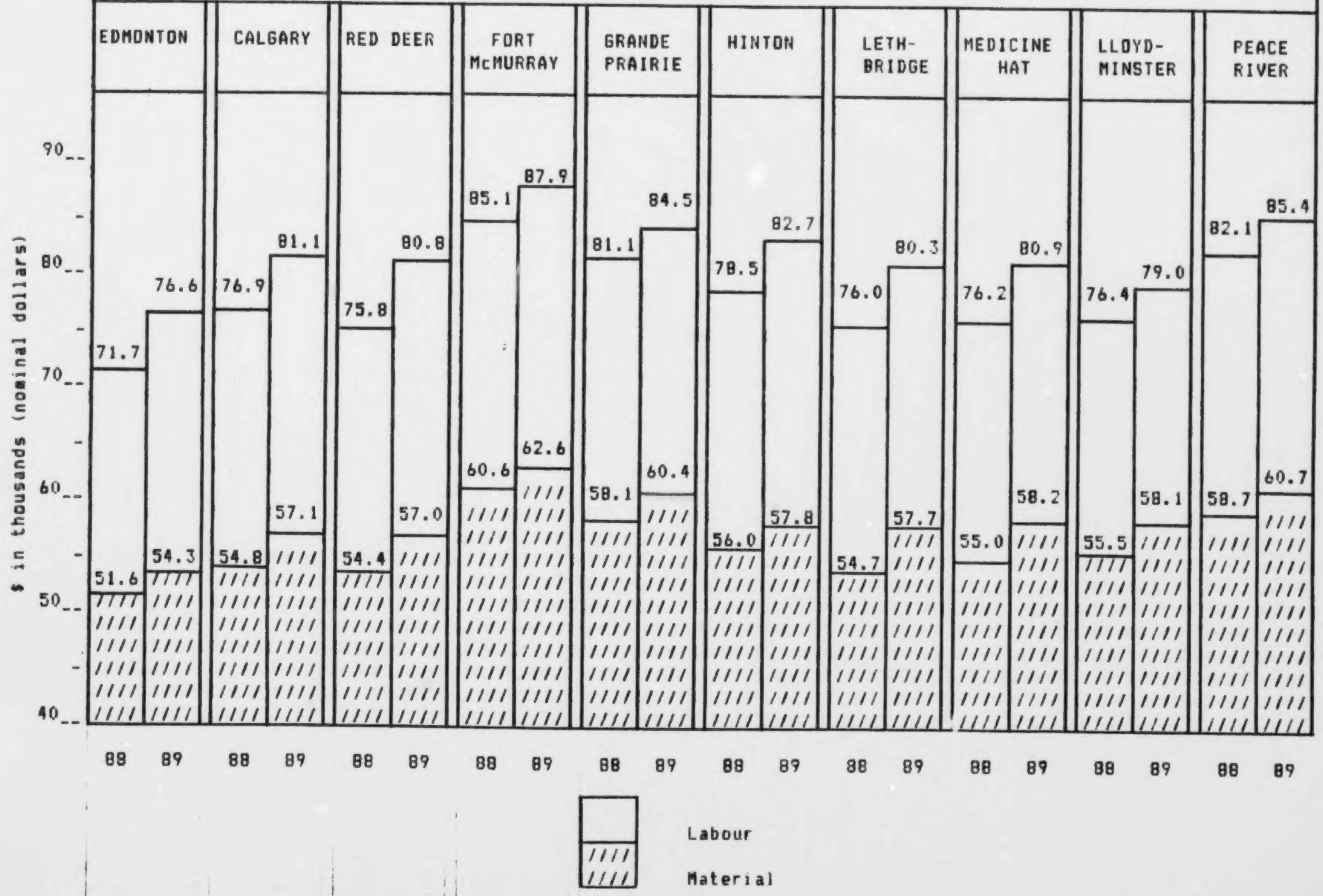
2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 3 : Comparative Costs Table 1988 - 1989

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
Labour Cost										
1989	$22,264	$23,993	$23,826	$25,307	$24,131	$24,865	$22,550	$22,762	$20,876	$24,604
1988	$20,063	$22,089	$21,306	$24,554	$22,973	$22,587	$21,291	$21,187	$20,867	$23,427
Difference	2201	1904	2520	753	1158	2278	1259	1575	9	1177
% Difference	11.0%	8.6%	11.8%	3.1%	5.0%	10.1%	5.9%	7.4%	0.0%	5.0%
Mat'l Cost										
1989	$54,318	$57,084	$56,984	$62,589	$60,402	$57,816	$57,777	$58,184	$58,096	$60,774
1988	$51,603	$54,762	$54,448	$60,583	$58,077	$55,955	$54,740	$55,045	$55,534	$58,653
Difference	2715	2322	2536	2006	2325	1861	3037	3139	2562	2121
% Difference	5.3%	4.2%	4.7%	3.3%	4.0%	3.3%	5.5%	5.7%	4.6%	3.6%
Total Cost										
1989	$76,582	$81,077	$80,810	$87,896	$84,533	$82,681	$80,327	$80,946	$78,972	$85,378
1988	$71,666	$76,851	$75,754	$85,137	$81,050	$78,542	$76,031	$76,232	$76,401	$82,080
Difference	4916	4226	5056	2759	3483	4139	4296	4714	2571	3298
% Difference	6.9%	5.5%	6.7%	3.2%	4.3%	5.3%	5.7%	6.2%	3.4%	4.0%

2.0 SUMMARY OF FINDINGS FOR THE SINGLE - DETACHED DWELLING

TABLE SD. 4 : Comparative Costs Bar Chart 1988 - 1989



2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

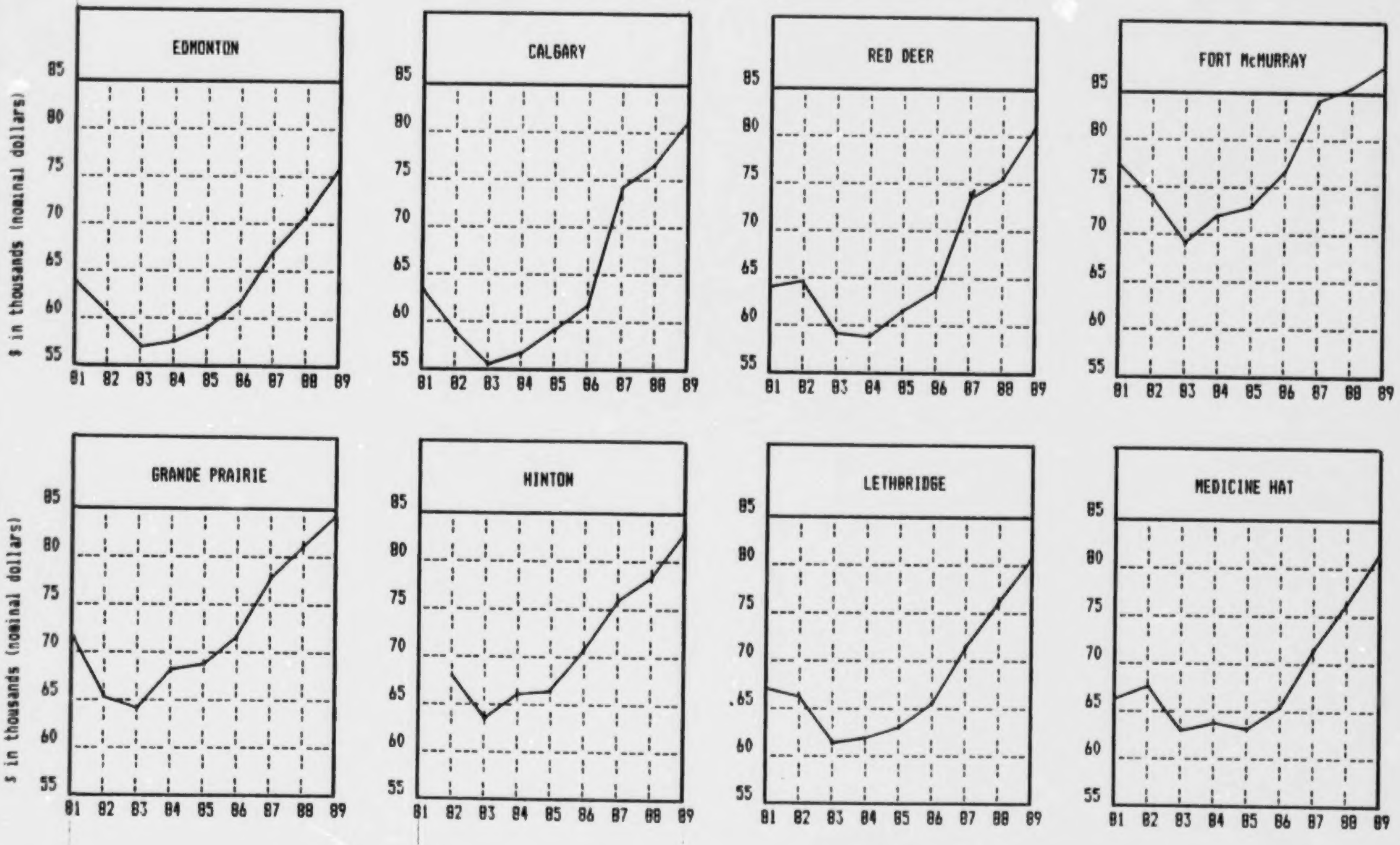
TABLE SD. 5 : Comparative Total Building Costs 1981 -1989 (nominal dollars)

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	* HINTON	LETHBRIDGE	MEDICINE HAT	** LLOYD-MINSTER	*** PEACE RIVER
1981	$67,692	$63,888	$63,336	$64,249	$77,357	$71,449	-	$67,057	$66,506	-	-
1982	$65,632	$60,374	$59,030	$64,697	$74,016	$65,145	$67,935	$66,489	$67,367	-	-
1983	$61,713	$57,170	$55,930	$59,116	$68,848	$64,732	$63,491	$61,493	$62,923	-	-
1984	$63,646	$57,256	$56,877	$58,496	$72,242	$68,194	$66,316	$62,010	$63,629	$67,798	-
1985	$64,852	$59,633	$59,754	$61,407	$72,913	$68,469	$66,661	$63,181	$63,250	$68,400	-
1986	$67,405	$62,079	$61,803	$63,733	$76,445	$71,932	$70,209	$65,231	$65,524	$69,692	-
1987	$74,644	$67,421	$74,588	$73,369	$84,110	$77,854	$75,871	$71,516	$72,150	$74,913	-
1988	$77,974	$71,666	$76,851	$75,754	$85,137	$81,050	$78,542	$76,031	$76,232	$76,401	$82,080
1989	$81,920	$76,582	$81,077	$80,810	$87,896	$84,533	$82,681	$80,327	$80,946	$78,972	$85,378

Notes :
- * Hinton was not included in the 1981 study
- ** Lloydminster was not included in the 1981 through 1983 studies
- *** Peace River was not included in the 1981 through 1987 studies
- >>> Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

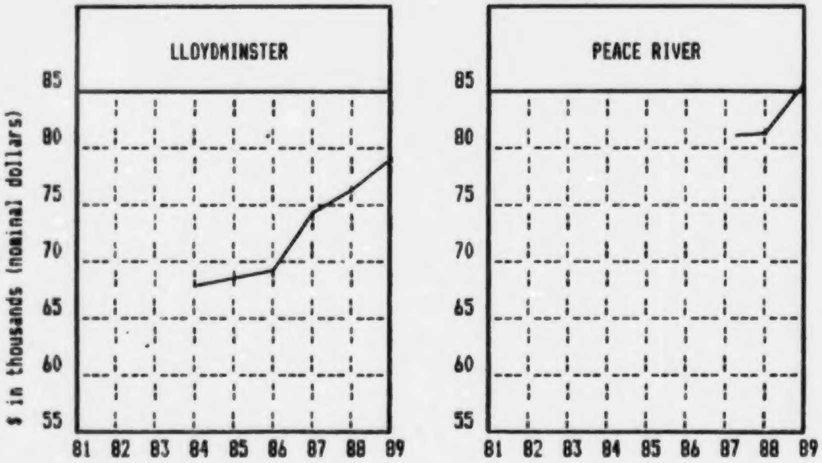
2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 6 : Comparative Total Costs Graphs 1981 -1989 (nominal dollars)



Note: Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

TABLE SD. 6 : Comparative Total Costs Graphs 1981 -1989 (nominal dollars) (cont'd)



2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 7 : Comparative Total Building Costs 1981 -1989 (inflation adjusted dollars) *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER	**** PEACE RIVER
1981	$97,058	$91,520	$90,902	$92,125	$110,815	$102,352	-	$96,243	$95,452	-	-
1982	$85,121	$78,237	$76,642	$83,919	$95,917	$84,421	$88,036	$86,326	$87,466	-	-
1983	$74,195	$68,678	$67,316	$71,084	$82,706	$77,762	$76,271	$74,012	$75,733	-	-
1984	$76,512	$68,782	$68,456	$70,338	$86,784	$81,921	$79,665	$74,633	$76,583	$81,445	-
1985	$75,847	$69,694	$69,968	$71,836	$85,214	$80,021	$77,907	$73,981	$74,062	$79,940	-
1986	$75,855	$69,813	$69,634	$71,740	$85,968	$80,892	$78,955	$73,496	$73,827	$78,373	-
1987	$80,862	$72,986	$80,898	$79,500	$91,051	$84,280	$82,133	$77,565	$78,254	$81,095	-
1988	$82,005	$75,321	$80,924	$79,693	$89,479	$85,184	$82,548	$80,061	$80,272	$80,297	$86,266
1989	$81,920	$76,582	$81,077	$80,810	$87,896	$84,533	$82,681	$80,327	$80,946	$78,972	$85,378

Notes : * 1. Expressed in inflation adjusted, real 1989 dollars
2. Inflation adjustments have been based on the Consumer Price Index for Edmonton and Calgary.

** Hinton was not included in the 1981 study

*** Lloydminster was not included in the 1981 through 1983 studies

**** Peace River was not included in the 1981 through 1987 studies

>>>> Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 8 : Comparative Total Cost Graphs 1981 -1989 (inflation adjusted dollars)

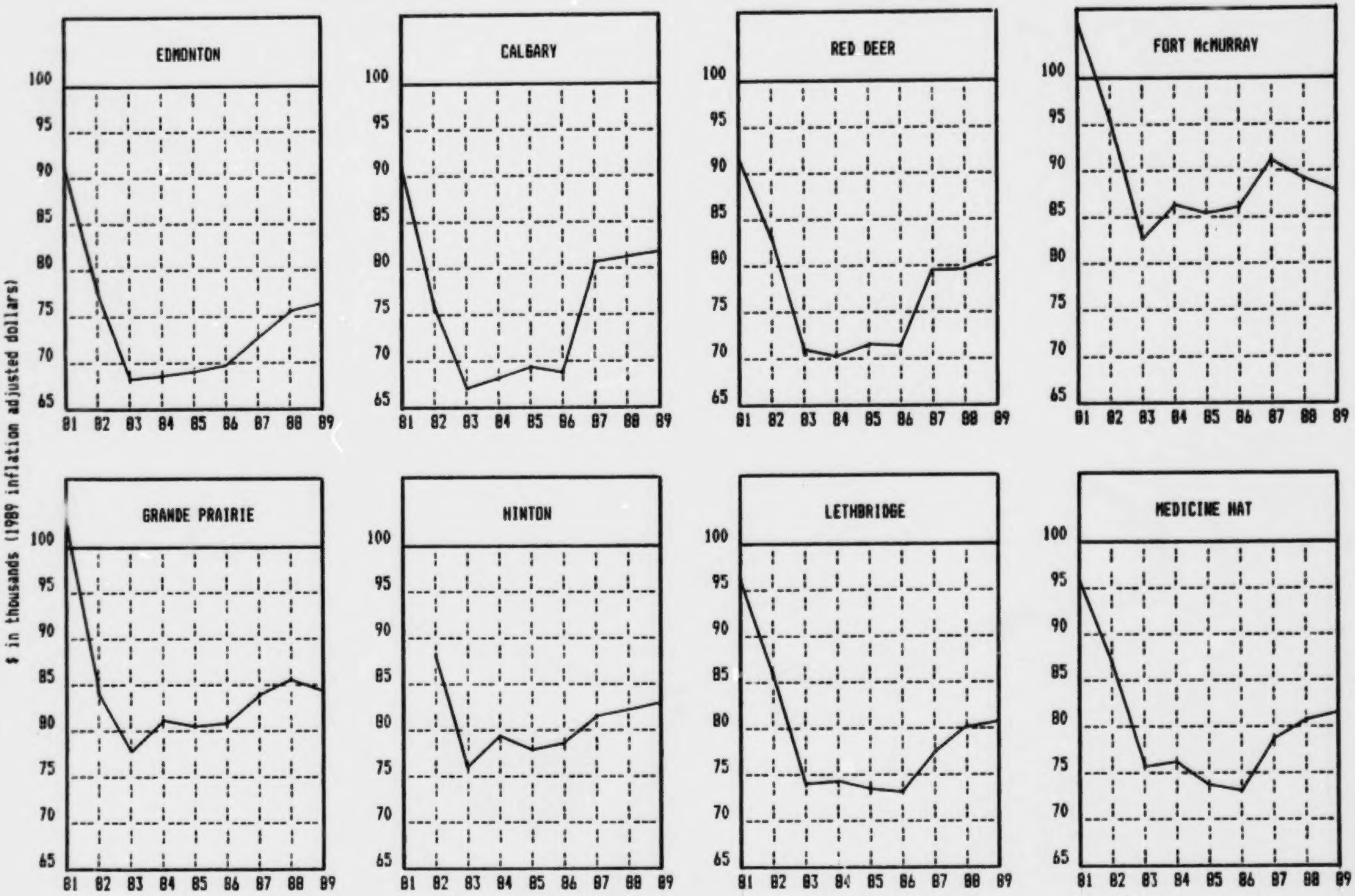
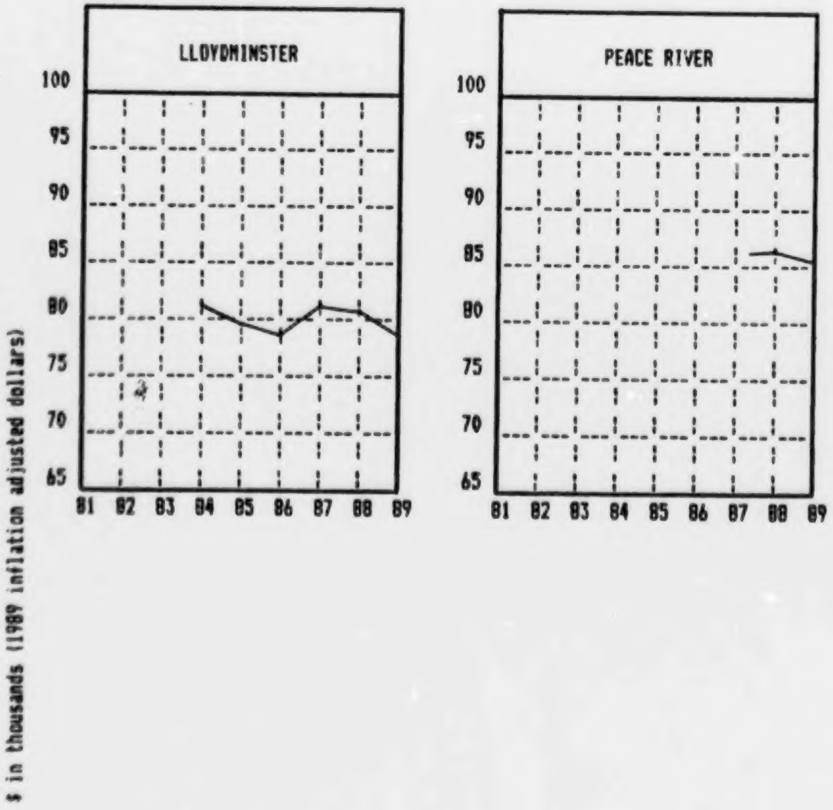


TABLE SD. 8 : Comparative Total Cost Graphs 1981 -1989 (inflation adjusted dollars) (cont'd)



2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 9 : Comparative Costs per Square Foot of Gross Floor Area 1981 - 1989 (nominal dollars)

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	* HINTON	LETHBRIDGE	MEDICINE HAT	** LLOYD-MINSTER	*** PEACE RIVER
1981	$41.66	$39.32	$38.98	$39.54	$47.60	$43.97	-	$41.27	$40.93	-	-
1982	$40.39	$37.15	$36.33	$39.81	$45.55	$40.09	$41.81	$40.92	$41.46	-	-
1983	$37.98	$35.18	$34.42	$36.38	$42.37	$39.83	$39.07	$37.84	$38.72	-	-
1984	$39.17	$35.23	$35.00	$36.00	$44.46	$41.97	$40.81	$38.16	$39.16	$41.72	-
1985	$39.91	$36.70	$36.77	$37.79	$44.87	$42.14	$41.02	$38.88	$38.92	$42.09	-
1986	$41.48	$38.20	$38.03	$39.22	$47.04	$44.27	$43.21	$40.14	$40.32	$42.89	-
1987	$45.93	$41.49	$45.90	$45.15	$51.76	$47.91	$46.69	$44.01	$44.40	$46.10	-
1988	$47.97	$44.09	$47.28	$46.61	$52.38	$49.87	$48.32	$46.78	$46.90	$47.01	$50.50
1989	$50.40	$47.12	$49.88	$49.72	$54.08	$52.01	$50.87	$49.42	$49.80	$48.59	$52.53

Notes :
* Hinton was not included in the 1981 study
** Lloydminster was not included in the 1981 through 1983 studies
*** Peace River was not included in the 1981 through 1987 studies
>>> Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 10 : Comparative Costs per Square Foot of Gross Floor Area 1981 - 1989 (inflation adjusted dollars) *

YEAR	AVERAGE	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	** HINTON	LETHBRIDGE	MEDICINE HAT	*** LLOYD-MINSTER	**** PEACE RIVER
1981	$59.71	$56.30	$55.92	$56.67	$68.17	$62.97	-	$59.21	$58.72	-	-
1982	$52.37	$48.13	$47.15	$51.63	$59.01	$51.94	$54.16	$53.11	$53.81	-	-
1983	$45.64	$42.25	$41.41	$43.73	$50.88	$47.84	$46.92	$45.53	$46.59	-	-
1984	$47.07	$42.31	$42.11	$43.27	$53.39	$50.40	$49.01	$45.91	$47.11	$50.10	-
1985	$46.66	$42.88	$43.04	$44.19	$52.42	$49.23	$47.93	$45.51	$45.56	$49.18	-
1986	$46.66	$42.95	$42.84	$44.13	$52.88	$49.76	$48.57	$45.21	$45.42	$48.21	-
1987	$49.75	$44.90	$49.77	$48.91	$56.01	$51.85	$50.53	$47.72	$48.14	$49.89	-
1988	$50.45	$46.34	$49.78	$49.03	$55.05	$52.40	$50.78	$49.25	$49.38	$49.40	$53.07
1989	$50.40	$47.12	$49.88	$49.72	$54.08	$52.01	$50.87	$49.42	$49.80	$48.59	$52.53

Notes : * 1. Expressed in inflation adjusted, real 1989 dollars
2. Inflation adjustments have been based on the Consumer Price Index for Edmonton and Calgary.

** Hinton was not included in the 1981 study

*** Lloydminster was not included in the 1981 through 1983 studies

**** Peace River was not included in the 1981 through 1987 studies

>>>> Costs for years prior to 1988 have been adjusted to apply to the split-level model used in the 1988 study instead of the bungalow used in previous years.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 11 : Trade Division Cost Summaries

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
Divisions										
1. Excavation	2,807	3,426	3,498	3,989	3,166	2,920	3,351	3,153	3,453	3,199
2. Concrete	9,685	9,856	10,060	11,826	11,224	11,415	10,077	10,903	10,352	10,493
3. Dampproofing	407	490	514	655	605	499	488	484	445	606
4. Siding	5,488	5,744	6,207	6,226	6,078	5,736	5,499	5,485	5,622	6,217
5. Roofing	1,798	1,956	1,920	1,873	1,936	1,736	1,806	1,855	1,588	2,008
6. Rough Carpentry	14,606	14,915	14,490	16,715	15,518	15,386	15,350	14,351	14,304	15,239
7. Finish Carpentry	2,140	2,217	2,065	2,219	2,077	2,009	2,092	2,075	2,023	2,175
8. Windows and Glazing	2,631	2,676	2,748	2,887	2,860	2,631	2,624	2,683	2,701	3,018
9. Sealants	63	77	69	69	70	64	61	65	60	70
10. Doors	3,273	3,271	3,495	3,579	3,772	3,516	3,399	3,385	3,531	3,889
11. Hardware	416	440	421	440	427	424	438	432	411	432
12. Ceramic Tile NA (included in plumbing).										
SUB - TOTAL	$43,314	$45,068	$45,487	$50,478	$47,733	$46,336	$45,185	$44,871	$44,490	$47,346

2.0 SUMMARY OF FINDINGS FOR THE SINGLE-DETACHED DWELLING

TABLE SD. 11 : Trade Division Cost Summaries (cont'd)

LOCATION	EDMONTON	CALGARY	RED DEER	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	MEDICINE HAT	LLOYD-MINSTER	PEACE RIVER
Divisions										
13. Wallboard	5,124	5,632	5,325	6,275	5,900	5,903	5,519	5,557	5,626	6,239
14. Flooring	3,439	3,647	3,594	3,490	3,873	3,522	3,452	3,654	3,518	3,970
15. Painting	2,418	2,588	2,576	2,693	2,792	2,743	2,756	2,765	2,524	2,779
16. Fittings	4,219	4,494	4,494	4,846	4,432	4,367	4,753	4,662	4,304	4,840
17. Specialties	576	608	587	612	629	587	612	617	578	644
18. Appliances	112	130	117	132	139	123	135	135	127	140
19. Plumbing	5,720	6,360	6,150	6,335	6,220	6,200	5,690	5,815	5,530	6,435
20. Heating	2,550	2,840	2,895	3,270	3,215	3,150	2,605	3,005	2,835	3,330
21. Electrical	3,610	4,210	4,085	4,265	4,100	4,250	4,120	4,365	3,940	4,155
22. Site Over-head	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500
TOTAL	$76,582	$81,077	$80,810	$87,896	$84,533	$82,681	$80,327	$80,946	$78,972	$85,378

3.0 COMMENTARY

3.0 COMMENTARY

3.1 General

Alberta's economy has maintained a modest rate of growth during 1989. There has been an increased demand for housing in certain centres due to the influx of people from other Provinces and the unemployment rate was down in comparison to the previous year. Province-wide, there has been an increase in housing starts indicating a general optimism for an improving economy. Activity in the oil business has been very poor but natural gas, timber and pulp and paper sectors continue to pick-up and major impacts from proposed projects will be realised over the next few years. Most areas of the Province have seen upward movement of housing prices although in smaller communities, this was to a lesser degree. Lot prices are up in most of the centres studied due to the lack of lower priced lots.

Costs for the prototypical single-detached house have increased by an average of 5.1% province-wide. The greatest increase was 6.9% in Edmonton and the lowest was 3.2% in Fort McMurray.

The graphic presentation of construction costs of the single-detached dwelling in Table SD.6 indicates that construction costs in all centres have moved above 1981 nominal dollars (from an average 1981 cost of $ 67,692 to an average 1989 cost of $ 81,920 or 21.0% more). However, expressed in terms of inflation adjusted, real 1989 dollars, as shown in table SD.8, costs are still 15.6% below the 1981 average of $ 97,058 at $ 81,920.

Increases in labour costs for the single-detached dwelling were greatest in Edmonton and in Red Deer due to shortages of skilled labour in these centres. Other centres have also experienced some skilled labour shortages, but to a much lesser degree.

3.0 COMMENTARY

3.1 General (continued)

Material prices for the single-detached dwelling have increased marginally in all centres. Material price increases varied according to the type of material and centre. One of the largest increases was on manufactured boarding which increased between 15% and 20%. Timber generally increased between 5% and 10%. The increases in timber and manufactured boarding prices can be attributed to bouyant markets. These increases were lowest in Fort McMurray due to lack of demand and in Grande Prairie, Hinton and Peace River because of their proximity to the source of supply. Whilst there has been no increase in concrete prices anywhere, they continue to vary considerably from centre to centre, due to demand, location and availability of aggregates and cement. Drywall and insulation prices fluctuated but have stayed in the same range. In most centres the majority of price increases were passed on to consumers; in previous years, builders have absorbed some increases to remain competitive in the marketplace.

No significant changes were observed as a result of building practice changes or changes in standard materials used by the majority of builders.

3.0 COMMENTARY

3.2 Highlights by Centre

Edmonton :

The 1989 cost of the typical house in Edmonton is 5.5% lower than its Calgary counterpart and 6.9% higher than the 1988 Edmonton cost. Expressed in nominal dollars, the total cost is higher than the 1981 cost by 19.9%. Expressed in inflation adjusted, real 1989 dollars, the total cost is 16.3% less than the 1981 cost.

Over the past year Edmonton has seen steady economic growth, a healthy increase in housing starts and a continuing strong resale market. The local factors which account for the cost differences between Edmonton and other centres are an in-migration of people, pent-up demand, land shortage and to a certain extent, a catching up with Calgary prices. The reasons for the changes within the centre from the previous year are more optimism about the local ecomony, improved demand for houses and labour shortages.

Calgary :

The 1989 cost of the typical house in Calgary is 5.9% higher than it's Edmonton counterpart and 5.5% higher than the 1988 Calgary cost. Expressed in nominal dollars, the total cost is higher than the 1981 cost by 28.0% . Expressed in inflation adjusted, real 1989 dollars, the total cost is 10.8% less than the 1981 cost.

Housing starts have increased dramatically from last year. The local factors which account for the cost differences between Calgary and other centres are an in-migration of people, pent-up demand and land shortage. The reasons for the changes within the centre from the previous year are improved demand, labour shortages and an attempt to regain income levels lost since 1981.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Red Deer :

The 1989 cost of the typical house in Red Deer is 0.3% lower than the Calgary cost, 5.5% higher than Edmonton cost, and 6.7% higher than the 1988 Red Deer cost. Expressed in nominal dollars, the total cost is 25.8% higher than the 1981 cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 12.3% less than the 1981 cost.

Migration of labour to better paying jobs in other areas of the Province has caused shortages of skilled workers forcing builders to pay wage rates similar to Calgary. The majority of materials are available in Red Deer at prices comparable to those in Edmonton or Calgary. Housing starts have increased from last year. Out-migration of labour has caused the main difference between Red Deer and other centres while labour shortages over the past year have been the main reason for changes within the centre.

Fort McMurray :

The 1989 cost of the typical house in Fort McMurray is 14.8% higher than that in Edmonton and 3.2% higher than the 1988 Fort McMurray cost. Expressed in nominal dollars, the total cost is 13.6% more than the 1981 cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 20.7% less than the 1981 cost.

Costs have risen marginally over last year. Housing starts have reduced dramatically from last year due to oil companies selling off their own properties at "bargain" prices and creating a surplus of relatively cheap housing. Indications are that this situation will continue for a number of years. Higher costs, because of the Northern location and because of the local resource related activity are the main factors which differentiate Fort McMurray costs from those in other centres. However, these differences are less this year because of the oil companies inventory of pre-owned homes for sale having greatly reduced local demand for new houses.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Grande Prairie :

The 1989 cost of the typical house in Grande Prairie is 10.4% higher than in Edmonton, and 4.3% higher than the 1988 Grande Prairie cost. Expressed in nominal dollars, the total cost is 18.3% higher than 1981 cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 17.4% less than the 1981 cost.

Activity in Grande Prairie has increased from last year and current demand is still good. Costs have increased partly due to a small shortage of skilled labour and partly due to improved local economic activity. Costs in Grande Prairie tend to be higher than in Edmonton partly due to the distance from a major centre and the need to haul in materials and partly due to the reduced competition found in a smaller centre. The difference is not as great as in previous years as prices in Grande Prairie have not increased at the same rate as in Edmonton.

Hinton :

The 1989 cost of the typical house in Hinton is 8.0% higher than in Edmonton and 5.3% higher than the 1988 Hinton cost. Expressed in nominal dollars, the total cost is 21.7% higher than the 1982* cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 6.1% less than the 1982* cost.

Hinton is the smallest of the ten centres studied and is most susceptible to outside influences. There is a premium on materials because of haulage charges and a premium on labour because the continuing lack of demand for new housing in the area has depleted the local labour force, compelling builders to import certain skilled trades and to pay subsistence allowances. Labour costs have risen locally because some workers have moved to other jobs created by pulp mill expansion and the like. Housing activity was still very low in 1989.

* 1982 has been selected as the base year as Hinton was not part of earlier studies.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Lethbridge :

The 1989 cost of the typical house in Lethbridge is 0.9% lower than in Calgary and 5.7% higher than the 1988 Lethbridge cost. Expressed in nominal dollars, the total cost is 19.8% higher than the 1981 cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 16.5% less than the 1981 cost.

Housing starts in Lethbridge have increased from last year and current demand is still good. Due to the migration of workers to better paying jobs in other areas, a shortage of skilled labour has helped increase costs. Material prices have increased slightly more than in Calgary due to increased haulage rates. Traditionally, labour costs have been less than Calgary because of lesser demand and material costs have been slightly more because of haulage charges. These differences have continued over the past year.

Medicine Hat :

The 1989 cost of the typical house in Medicine Hat is 0.2% less than in Calgary and 6.2% higher than the 1988 Medicine Hat cost. Expressed in nominal dollars, the total cost is 21.7% more than the 1981 cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 15.2% less than the 1981 cost.

As with Lethbridge, current demand in Medicine Hat is good and housing starts have increased from last year. Builders have also had to pay more for skilled labour and also for materials. The comments with regard to cost differentials applied to Lethbridge above also apply to Medicine Hat.

3.0 COMMENTARY

3.2 Highlights by Centre (continued)

Lloydminster :

The 1989 cost of the typical house in Lloydminster is 3.1% higher than in Edmonton and 3.4% higher than the 1988 Lloydminster cost. Expressed in nominal dollars, the total cost is 16.5% higher than the 1984* cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 3.0% less than the 1984 cost.

Activity in Lloydminster was very low in 1989 with few new housing starts. The factors which make the cost differences between Lloydminster and elsewhere are its distance from major centres and the local oil related activity. However, uncertainty about future resource projects has restricted growth and the differences between Lloydminster and Edmonton are decreasing because Lloydminster prices are not moving up at the same rate as those in Edmonton. Because of the low activity over the past year, labour costs have hardly moved. Material costs have increased partly because a substantial part of them come from Edmonton and Edmonton materials have increased and because of higher haulage charges.

* 1984 has been selected as the base year as Lloydminster was not part of earlier studies.

Peace River :

The 1989 cost of the typical house in Peace River is 11.5% higher than in Edmonton and 4.02% higher than the 1988* Peace River cost. Expressed in inflation adjusted, real 1989 dollars, the total cost is 1.0% less than the 1988 cost.

Housing starts have increased dramatically from last year and current demand is still very good due to the influx of persons connected with the local pulp mill project. Lot prices have risen significantly whilst other costs have risen only slightly. The local factors which make the cost differences between Peace River and elsewhere are its distance from a major centre, the need to haul in materials and the current activity created by pulp mill construction. Since last year, labour rates have increased, but not as much as they might have because of the significant in-migration of workers.

* 1988 has been selected as the base year as Peace River was not part of earlier studies.

4.0 DETAILED COST ESTIMATES BY TRADE DIVISION FOR EACH CENTRE

DETAILED COST ESTIMATES FOR EDMONTON

1989 ALBERTA HOUSE COST COMPARISON STUDY   SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA :   151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.53	157	0.89	264	1.42	422
1.11	Excavate trench for garage grade beam.	4	m3	3.52	14	6.57	26	10.09	40
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.02	75	1.43	106	2.45	181
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.62	91	6.93	173	10.55	264
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.00	164	0.32	52	1.32	216
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	7.55	1,684	7.55	1,684
	SUBTOTAL - EXCAVATION	18.59	/m2 GFA		501		2,306		2,807
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	89.70	1,704	89.70	1,704

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	89.70	90	89.70	90
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	15.12	318	31.40	659	46.52	977
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.85	222	0.85	222
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.85	31	0.85	31
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.28	95	1.28	95
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	29.85	1,194	12.82	513	42.67	1,707
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.42	271	5.20	135	15.62	406
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.99	359	6.37	573	10.36	932
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.02	371	9.25	685	14.27	1,056

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	25.76	26	220.00	220	245.76	246
2.60	Parging to concrete walls.	10	m2	10.19	102	3.13	31	13.32	133
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	616.00	616	1,470.00	1,470	2,086.00	2,086
	SUBTOTAL - CONCRETE	64.14	/m2 GFA		3,257		6,428		9,685
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.34	43	0.32	41	0.66	84
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	3.12	140	4.05	182	7.17	323
	SUBTOTAL - DAMPROOFING	2.70	/m2 GFA		184		223		407

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	5.31	791	13.78	2,053	19.09	2,844
4.20	Prefinished perforated aluminum soffit.	44	m2	4.37	192	10.19	448	14.56	641
4.30	Prefinished aluminum fascia.	70	m	0.90	63	2.39	167	3.29	230
4.40	Brick facing to front elevation.	20	m2	48.99	980	39.68	794	88.67	1,773
	SUBTOTAL - SIDING	36.34	/m2 GFA		2,026		3,462		5,488
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.86	515	4.41	794	7.27	1,309
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.51	151	3.38	338	4.89	489
	SUBTOTAL - ROOFING	11.91	/m2 GFA		666		1,132		1,798

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)									
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	452.53	3,801	452.53	3,801
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	618.08	1,483	618.08	1,483
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.92	2,788	7.92	2,788
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	5.99	1,012	5.99	1,012
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	28.37	4,284	0.00	0	28.37	4,284
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.47	26	0.87	49	1.34	75

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.90	16	14.30	29	22.20	44
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	480.00	480	638.00	638	1,118.00	1,118
	SUBTOTAL - CARPENTRY (ROUGH)		96.73	/m2 GFA		4,806		9,800		14,606
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	84.00	84	66.00	66	150.00	150
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	86.00	86	83.00	83	169.00	169
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	87.00	87	97.00	97	184.00	184
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.70	19	8.56	34	13.26	53

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	62.00	124	132.00	264	194.00	388
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.68	606	1.25	451	2.93	1,058
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	28.00	56	41.25	83	69.25	139
	SUBTOTAL - CARPENTRY (FINISH)	14.17	/m2 GFA		1,062		1,078		2,140
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	565.00	565	565.00	565
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	246.00	1,476	246.00	1,476
	- 900 x 1550 mm	2	No.	0.00	0	295.00	590	295.00	590
	SUBTOTAL - WINDOWS AND GLAZING	17.42	/m2 GFA		0		2,631		2,631

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.22	24	0.11	12	0.33	36
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.20	18	0.59	9	1.79	27
SUBTOTAL - SEALANTS	0.42	/m2 GFA		42		21		63
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	24.65	25	292.00	292	316.65	317
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	24.65	25	158.00	158	182.65	183
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	67.25	67	954.00	954	1,021.25	1,021
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	112.00	112	550.00	550	662.00	662

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.60	13	40.95	41	53.55	54
- 711 x 2080 mm	3	No.	12.60	38	40.95	123	53.55	161
- 762 x 2080 mm	6	No.	12.60	76	40.95	246	53.55	321
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	10.65	11	38.85	39	49.50	50
- 1220 x 2080 mm	3	No.	10.65	32	67.20	202	77.85	234
- 1320 x 2080 mm	1	No.	10.65	11	72.45	72	83.10	83
- 1524 x 2080 mm	1	No.	10.65	11	77.70	78	88.35	88
- 1830 x 2080 mm	1	No.	10.65	11	90.30	90	100.95	101
SUBTOTAL - DOORS	21.68	/m2 GFA		429		2,844		3,273
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	17.25	35	30.45	61	47.70	95
11.20 Security deadbolt.	1	No.	17.25	17	32.55	33	49.80	50
11.30 Latch sets.	7	sets	8.52	60	13.65	96	22.17	155
11.40 Bathroom privacy latch sets.	3	sets	8.52	26	15.75	47	24.27	73
11.60 Door stops.	11	No.	2.13	23	1.75	19	3.88	43
SUBTOTAL - HARDWARE	2.75	/m2 GFA		160		256		416

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.63	1,665	1.98	1,253	4.61	2,918
13.40 Finish to ceilings - textured.	138	m2	1.26	174	1.10	152	2.36	326
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.91	155	4.20	714	5.11	869
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.36	121	5.74	511	7.10	632
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.29	75	0.32	83	0.61	158
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.29	20	0.22	15	0.51	35
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.60	41	2.15	146	2.75	187
SUBTOTAL - WALLBOARD	33.93	/m2 BFA		2,250		2,874		5,124

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.30	132	12.54	263	18.84	396
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.63	385	25.08	2,658	28.71	3,043
SUBTOTAL - FLOORING	22.77	/m2 GFA		517		2,922		3,439
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.49	36	1.26	10	5.75	46
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	68.35	68	20.99	21	89.34	89
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.49	94	1.26	26	5.75	121
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.02	911	0.69	311	2.71	1,222
15.30 Two coats semigloss on internal doors and frames.	10	No.	22.40	224	6.28	63	28.68	287

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	29.50	207	8.13	57	37.63	263
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.90	174	0.21	41	1.11	214
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.90	4	0.21	1	1.11	4
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.80	6	1.10	2	3.90	8
15.43 Stain finish to cedar deck.	14	m2	3.20	45	0.82	11	4.02	56
15.44 Stain finish to deck handrail and balustrade.	16	m	5.04	81	1.64	26	6.68	107
SUBTOTAL - PAINTING	16.01	/m2 GFA		1,848		570		2,418
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.09	82	5.67	113	9.76	195
16.20 Vanities and base cabinets.	7	m	36.40	255	391.65	2,742	428.05	2,996
16.21 Kitchen wall cabinets.	4	m	36.40	146	220.50	882	256.90	1,028
SUBTOTAL - FITTINGS	27.94	/m2 GFA		482		3,737		4,219

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	5.66	51	9.24	83	14.90	134
17.20 Medicine cabinets	2	No.	11.05	22	61.90	124	72.95	146
17.25 Mirrors	2	No.	11.05	22	78.75	158	89.80	180
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.10	12	6.81	14	12.91	26
17.40 Mail box and house numbers	1	set	6.10	6	31.48	31	37.58	38
17.50 18 mm dia. chrome coat rods.	6	No.	3.70	22	5.05	30	8.75	53
SUBTOTAL - SPECIALTIES	3.81	/m2 GFA		136		440		576
18. APPLIANCES								
18.10 Range hood	1	No.	18.00	18	94.49	94	112.49	112
SUBTOTAL - APPLIANCES	0.74	/m2 GFA		18		94		112

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,255.00	2,255	3,465.00	3,465	5,720.00	5,720
SUBTOTAL - PLUMBING	37.88	/m2 GFA		2,255		3,465		5,720
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	660.00	660	1,890.00	1,890	2,550.00	2,550
SUBTOTAL - HEATING	16.89	/m2 GFA		660		1,890		2,550

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

EDMONTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL							
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1 house	0.00	0	998.00	998	998.00	998
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1 house	965.00	965	1,647.00	1,647	2,612.00	2,612
SUBTOTAL - ELECTRICAL	23.91 /m2 GFA		965		2,645		3,610
22. SITE OVERHEAD							
22.10 Site Overhead (Allowance)	1 house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42 /m2 GFA		0		5,500		5,500
TOTAL - EDMONTON	507.17 /m2 GFA		$22,264		$54,318		$76,582

DETAILED COST ESTIMATES FOR CALGARY

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.58	172	1.94	576	2.52	748
1.11	Excavate trench for garage grade beam.	4	m3	3.56	14	8.21	33	11.77	47
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.00	74	1.91	141	2.91	215
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.93	98	15.22	381	19.15	479
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.99	162	0.32	52	1.31	215
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	7.72	1,722	7.72	1,722
	SUBTOTAL - EXCAVATION	22.69	/m2 GFA		521		2,905		3,426
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	83.42	1,585	83.42	1,585

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	83.42	83	83.42	83
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	19.45	408	30.80	647	50.25	1,055
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.91	238	0.91	238
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.91	33	0.91	33
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.39	103	1.39	103
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	29.12	1,165	13.19	528	42.31	1,692
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.16	264	5.35	139	15.51	403
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	4.21	379	6.12	551	10.33	930
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.32	394	8.65	640	13.97	1,034

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	27.00	27	225.00	225	252.00	252
2.60	Parging to concrete walls.	10	m2	10.52	105	3.60	36	14.12	141
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	643.00	643	1,664.00	1,664	2,307.00	2,307
	SUBTOTAL - CONCRETE	65.27	/m2 GFA		3,385		6,471		9,856
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.44	56	0.38	48	0.82	104
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.23	190	4.34	195	8.57	386
	SUBTOTAL - DAMPROOFING	3.25	/m2 GFA		246		244		490

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING								
4.10 100 mm vinyl siding including building paper.	149	m2	5.75	857	14.35	2,138	20.10	2,995
4.20 Prefinished perforated aluminum soffit.	44	m2	4.77	210	10.25	451	15.02	661
4.30 Prefinished aluminum fascia.	70	m	1.03	72	2.58	181	3.61	253
4.40 Brick facing to front elevation.	20	m2	52.93	1,059	38.85	777	91.78	1,836
SUBTOTAL - SIDING	38.04	/m2 GFA		2,197		3,547		5,744
5. ROOFING								
5.10 Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	3.23	581	4.41	794	7.64	1,375
5.20 Eavestrough and downspouts. aluminum prefinished fittings.	100	m	2.07	207	3.74	374	5.81	581
SUBTOTAL - ROOFING	12.95	/m2 GFA		788		1,168		1,956

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)								
6.10 Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	464.12	3,899	464.12	3,899
6.20 Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	623.58	1,497	623.58	1,497
6.30 Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.39	2,953	8.39	2,953
6.35 Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	5.99	1,012	5.99	1,012
6.40 Labour Only - complete house framing including trusses and window installation.	151	m2	28.48	4,300	0.00	0	28.48	4,300
6.50 Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.45	25	0.87	49	1.32	74

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.80	16	16.50	33	24.30	49
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	497.00	497	634.00	634	1,131.00	1,131
	SUBTOTAL - CARPENTRY (ROUGH)		98.77	/m2 GFA		4,838		10,077		14,915
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	87.00	87	67.00	67	154.00	154
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	89.00	89	83.00	83	172.00	172
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	90.00	90	98.00	98	188.00	188
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.64	19	8.47	34	13.11	52

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	63.00	126	135.00	270	198.00	396
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.75	632	1.33	480	3.08	1,112
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	29.45	59	42.12	84	71.57	143
	SUBTOTAL - CARPENTRY (FINISH)	14.68	/m2 GFA		1,101		1,116		2,217
	8. WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	572.00	572	572.00	572
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	251.00	1,506	251.00	1,506
	- 900 x 1550 mm	2	No.	0.00	0	299.00	598	299.00	598
	SUBTOTAL - WINDOWS AND GLAZING	17.72	/m2 GFA		0		2,676		2,676

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.30	33	0.15	16	0.45	49
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.26	19	0.60	9	1.86	28
SUBTOTAL - SEALANTS	0.51	/m2 GFA		52		25		77
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	26.50	27	286.00	286	312.50	313
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	26.50	27	158.00	158	184.50	185
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	69.15	69	979.00	979	1,048.15	1,048
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	108.00	108	538.00	538	646.00	646

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	13.50	14	39.79	40	53.29	53
- 711 x 2080 mm	3	No.	13.50	41	39.79	119	53.29	160
- 762 x 2080 mm	6	No.	13.50	81	39.79	239	53.29	320
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	11.35	11	37.79	38	49.14	49
- 1220 x 2080 mm	3	No.	11.35	34	65.26	196	76.61	230
- 1320 x 2080 mm	1	No.	11.35	11	70.36	70	81.71	82
- 1524 x 2080 mm	1	No.	11.35	11	75.49	75	86.84	87
- 1830 x 2080 mm	1	No.	11.35	11	87.79	88	99.14	99
SUBTOTAL - DOORS	21.66	/m2 GFA		445		2,826		3,271
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	17.30	35	34.45	69	51.75	104
11.20 Security deadbolt.	1	No.	17.30	17	33.25	33	50.55	51
11.30 Latch sets.	7	sets	9.75	68	13.65	96	23.40	164
11.40 Bathroom privacy latch sets.	3	sets	9.75	29	15.75	47	25.50	77
11.60 Door stops.	11	No.	2.45	27	1.74	19	4.19	46
SUBTOTAL - HARDWARE	2.91	/m2 GFA		176		264		440

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.09	1,956	2.04	1,291	5.13	3,247
13.40 Finish to ceilings - textured.	138	m2	1.33	184	1.19	164	2.52	348
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.16	197	4.41	750	5.57	947
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.39	124	5.80	516	7.19	640
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.36	93	0.32	83	0.68	176
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.30	20	0.22	15	0.52	35
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.76	52	2.74	186	3.50	238
SUBTOTAL - WALLBOARD	37.30	/m2 GFA		2,626		3,006		5,632

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.52	137	13.02	273	19.54	410
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.08	432	26.46	2,805	30.54	3,237
SUBTOTAL - FLOORING	24.15	/m2 GFA		569		3,078		3,647
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.62	37	1.30	10	5.92	47
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	68.00	68	22.04	22	90.04	90
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.60	97	1.30	27	5.90	124
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.31	1,042	0.70	316	3.01	1,358
15.30 Two coats semigloss on internal doors and frames.	10	No.	22.50	225	6.59	66	29.09	291

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	29.40	206	8.13	57	37.53	263
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.99	191	0.22	42	1.21	234
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.99	4	0.22	1	1.21	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.86	6	1.14	2	4.00	8
15.43 Stain finish to cedar deck.	14	m2	3.35	47	0.86	12	4.21	59
15.44 Stain finish to deck handrail and balustrade.	16	m	5.16	83	1.73	28	6.89	110
SUBTOTAL - PAINTING	17.14 /m2 GFA			2,004		584		2,588
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.53	91	6.28	126	10.81	216
16.20 Vanities and base cabinets.	7	m	38.66	271	412.00	2,884	450.66	3,155
16.21 Kitchen wall cabinets.	4	m	38.66	155	242.00	968	280.66	1,123
SUBTOTAL - FITTINGS	29.76 /m2 GFA			516		3,978		4,494

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.00	54	9.51	86	15.51	140
17.20 Medicine cabinets	2	No.	11.88	24	65.63	131	77.51	155
17.25 Mirrors	2	No.	11.88	24	81.90	164	93.78	188
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.05	12	6.93	14	12.98	26
17.40 Mail box and house numbers	1	set	6.05	6	33.44	33	39.49	39
17.50 18 mm dia. chrome coat rods.	6	No.	4.27	26	5.78	35	10.05	60
SUBTOTAL - SPECIALTIES	4.03	/m2 GFA		145		463		608
18. APPLIANCES								
18.10 Range hood	1	No.	19.45	19	111.00	111	130.45	130
SUBTOTAL - APPLIANCES	0.86	/m2 GFA		19		111		130

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1 house	2,420.00	2,420	3,940.00	3,940	6,360.00	6,360
SUBTOTAL - PLUMBING	42.12 /m2 GFA		2,420		3,940		6,360
20. HEATING							
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1 house	740.00	740	2,100.00	2,100	2,840.00	2,840
SUBTOTAL - HEATING	18.81 /m2 GFA		740		2,100		2,840

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

CALGARY

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL							
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1 house	0.00	0	1,160.00	1,160	1,160.00	1,160
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1 house	1,205.00	1,205	1,845.00	1,845	3,050.00	3,050
SUBTOTAL - ELECTRICAL	27.88 /m2 GFA		1,205		3,005		4,210
22. SITE OVERHEAD							
22.10 Site Overhead (Allowance)	1 house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42 /m2 GFA		0		5,500		5,500
TOTAL - CALGARY	536.93 /m2 GFA		$23,993		$57,084		$81,077

DETAILED COST ESTIMATES FOR RED DEER

1989 ALBERTA HOUSE COST COMPARISON STUDY　　SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA :　151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.54	160	1.30	386	1.84	546
1.11	Excavate trench for garage grade beam.	4	m3	3.57	14	8.26	33	11.83	47
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.08	80	1.52	112	2.60	192
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.88	97	12.14	304	16.02	401
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.02	167	0.32	52	1.34	220
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	9.38	2,092	9.38	2,092
	SUBTOTAL - EXCAVATION	23.17	/m2 GFA		519		2,979		3,498
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	99.57	1,892	99.57	1,892

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	99.57	100	99.57	100
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	15.12	318	34.87	732	49.99	1,050
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.87	227	0.87	227
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.87	31	0.87	31
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.30	96	1.30	96
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	28.65	1,146	11.82	473	40.47	1,619
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.01	260	4.79	125	14.80	385
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.84	346	7.07	636	10.91	982
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.85	359	10.27	760	15.12	1,119

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	25.76	26	240.00	240	265.76	266
2.60	Parging to concrete walls.	10	m2	9.54	95	3.30	33	12.84	128
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle. mantle.	1	No.	616.00	616	1,550.00	1,550	2,166.00	2,166
	SUBTOTAL - CONCRETE	66.62	/m2 GFA		3,165		6,895		10,060
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.47	60	0.40	51	0.87	110
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.63	208	4.33	195	8.96	403
	SUBTOTAL - DAMPROOFING	3.40	/m2 GFA		268		246		514

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING								
4.10 100 mm vinyl siding including building paper.	149	m2	7.50	1,118	13.78	2,053	21.28	3,171
4.20 Prefinished perforated aluminum soffit.	44	m2	6.14	270	10.06	443	16.20	713
4.30 Prefinished aluminum fascia.	70	m	0.99	69	2.39	167	3.38	237
4.40 Brick facing to front elevation.	20	m2	55.69	1,114	48.64	973	104.33	2,087
SUBTOTAL - SIDING	41.11	/m2 GFA		2,571		3,636		6,207
5. ROOFING								
5.10 Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	3.06	551	4.20	756	7.26	1,307
5.20 Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.91	191	4.22	422	5.76	576
SUBTOTAL - ROOFING	12.72	/m2 GFA		742		1,178		1,920

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)								
6.10 Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	427.85	3,594	427.85	3,594
6.20 Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	584.37	1,402	584.37	1,402
6.30 Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.25	2,904	8.25	2,904
6.35 Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	6.24	1,055	6.24	1,055
6.40 Labour Only - complete house framing including trusses and window installation.	151	m2	28.37	4,284	0.00	0	28.37	4,284
6.50 Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.47	26	0.91	51	1.38	77

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.90	16	15.51	31	23.41	47
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	481.00	481	646.00	646	1,127.00	1,127
	SUBTOTAL - CARPENTRY (ROUGH)		95.96 /m2 GFA			4,807		9,683		14,490
	7. CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	84.00	84	66.00	66	150.00	150
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	87.00	87	80.00	80	167.00	167
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	88.00	88	96.00	96	184.00	184
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.70	19	8.33	33	13.03	52

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	62.00	124	128.00	256	190.00	380
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.51	545	1.24	448	2.75	993
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	28.00	56	41.70	83	69.70	139
	SUBTOTAL - CARPENTRY (FINISH)	13.68	/m2 GFA		1,003		1,062		2,065
	8. WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	590.00	590	590.00	590
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	257.00	1,542	257.00	1,542
	- 900 x 1550 mm	2	No.	0.00	0	308.00	616	308.00	616
	SUBTOTAL - WINDOWS AND GLAZING	18.20	/m2 GFA		0		2.748		2,748

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.25	27	0.13	14	0.38	41
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.22	18	0.58	9	1.80	27
SUBTOTAL - SEALANTS	0.46	/m2 GFA		46		23		69
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	25.20	25	304.00	304	329.20	329
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	25.20	25	165.00	165	190.20	190
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	69.50	70	992.00	992	1,061.50	1,062
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	118.00	118	583.00	583	701.00	701

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.35	12	46.40	46	58.75	59
- 711 x 2080 mm	3	No.	12.35	37	46.40	139	58.75	176
- 762 x 2080 mm	6	No.	12.35	74	46.40	278	58.75	353
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	10.65	11	41.57	42	52.22	52
- 1220 x 2080 mm	3	No.	10.65	32	77.39	232	88.04	264
- 1320 x 2080 mm	1	No.	10.65	11	83.44	83	94.09	94
- 1524 x 2080 mm	1	No.	10.65	11	89.49	89	100.14	100
- 1830 x 2080 mm	1	No.	10.65	11	104.00	104	114.65	115
SUBTOTAL - DOORS	23.15	/m2 GFA		436		3,059		3,495
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.80	34	30.45	61	47.25	95
11.20 Security deadbolt.	1	No.	16.80	17	32.55	33	49.35	49
11.30 Latch sets.	7	sets	9.00	63	13.65	96	22.65	159
11.40 Bathroom privacy latch sets.	3	sets	9.00	27	15.75	47	24.75	74
11.60 Door stops.	11	No.	2.25	25	1.75	19	4.00	44
SUBTOTAL - HARDWARE	2.79	/m2 GFA		165		256		421

12. Ceramic Tile NA (included in plumbing).

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.78	1,760	1.98	1,253	4.76	3,013
13.40 Finish to ceilings - textured.	138	m2	1.45	200	1.16	160	2.61	360
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.00	170	4.28	728	5.28	898
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.40	125	5.87	522	7.27	647
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.33	85	0.32	83	0.65	168
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.33	22	0.24	16	0.57	39
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.74	50	2.19	149	2.93	199
SUBTOTAL - WALLBOARD	35.26	/m2 GFA		2,413		2,912		5,325

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.19	130	12.54	263	18.73	393
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.96	420	26.23	2,780	30.19	3,200
SUBTOTAL - FLOORING	23.80	/m2 GFA		550		3,044		3,594
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.49	36	1.30	10	5.79	46
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	68.25	68	20.30	20	88.55	89
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.49	94	1.30	27	5.79	122
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.27	1,024	0.76	343	3.03	1,367
15.30 Two coats semigloss on internal doors and frames.	10	No.	22.33	223	6.66	67	28.99	290

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	26.86	188	8.46	59	35.32	247
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.97	187	0.24	46	1.21	234
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.97	4	0.24	1	1.21	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.90	6	1.17	2	4.07	8
15.43 Stain finish to cedar deck.	14	m2	3.33	47	0.86	12	4.19	59
15.44 Stain finish to deck handrail and balustrade.	16	m	5.20	83	1.72	28	6.92	111
SUBTOTAL - PAINTING	17.06 /m2 GFA			1,960		616		2,576
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.23	85	6.07	121	10.30	206
16.20 Vanities and base cabinets.	7	m	37.00	259	419.00	2,933	456.00	3,192
16.21 Kitchen wall cabinets.	4	m	37.00	148	237.00	948	274.00	1,096
SUBTOTAL - FITTINGS	29.76 /m2 GFA			492		4,002		4,494

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.66	60	9.24	83	15.90	143
17.20 Medicine cabinets	2	No.	11.20	22	61.90	124	73.10	146
17.25 Mirrors	2	No.	11.20	22	78.75	158	89.95	180
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.16	12	6.81	14	12.97	26
17.40 Mail box and house numbers	1	set	6.16	6	31.48	31	37.64	38
17.50 18 mm dia. chrome coat rods.	6	No.	3.92	24	5.05	30	8.97	54
SUBTOTAL - SPECIALTIES	3.89	/m2 GFA		147		440		587
18. APPLIANCES								
18.10 Range hood	1	No.	17.36	17	100.00	100	117.36	117
SUBTOTAL - APPLIANCES	0.77	/m2 GFA		17		100		117

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1 house	2,440.00	2,440	3,710.00	3,710	6,150.00	6,150
SUBTOTAL - PLUMBING	40.73 /m2 GFA		2,440		3,710		6,150
20. HEATING							
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1 house	785.00	785	2,110.00	2,110	2,895.00	2,895
SUBTOTAL - HEATING	19.17 /m2 GFA		785		2,110		2,895

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

RED DEER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL							
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1 house	0.00	0	1,000.00	1,000	1,000.00	1,000
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1 house	1,300.00	1,300	1,785.00	1,785	3,085.00	3,085
SUBTOTAL - ELECTRICAL	27.05 /m2 GFA		1,300		2,785		4,085
22. SITE OVERHEAD							
22.10 Site Overhead (Allowance)	1 house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42 /m2 GFA		0		5,500		5,500
TOTAL - RED DEER	535.17 /m2 GFA		$23,826		$56,984		$80,810

DETAILED COST ESTIMATES FOR FORT McMURRAY

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.65	193	1.15	342	1.80	535
1.11	Excavate trench for garage grade beam.	4	m3	4.26	17	8.47	34	12.73	51
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.18	87	1.98	147	3.16	234
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.36	84	20.75	519	24.11	603
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.96	157	0.32	52	1.28	210
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	10.57	2,357	10.57	2,357
	SUBTOTAL - EXCAVATION	26.42 /m2 GFA			539		3,450		3,989
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	126.48	2,403	126.48	2,403

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	126.48	126	126.48	126
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	15.75	331	44.38	932	60.13	1,263
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.89	232	0.89	232
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.89	32	0.89	32
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.35	100	1.35	100
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	28.07	1,123	15.60	624	43.67	1,747
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.80	255	6.32	164	16.12	419
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.76	338	8.98	808	12.74	1,147
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.74	351	13.03	964	17.77	1,315

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	25.20	25	232.00	232	257.20	257
2.60	Parging to concrete walls.	10	m2	9.70	97	4.78	48	14.48	145
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	700.00	700	1,940.00	1,940	2,640.00	2,640
	SUBTOTAL - CONCRETE	78.32	/m2 GFA		3,220		8,606		11,826
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.41	52	0.42	53	0.83	105
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	7.49	337	4.73	213	12.22	550
	SUBTOTAL - DAMPROOFING	4.34	/m2 GFA		389		266		655

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	7.06	1,052	14.39	2,144	21.45	3,196
4.20	Prefinished perforated aluminum soffit.	44	m2	6.61	291	10.30	453	16.91	744
4.30	Prefinished aluminum fascia.	70	m	1.21	85	2.76	193	3.97	278
4.40	Brick facing to front elevation.	20	m2	53.03	1,061	47.37	947	100.40	2,008
	SUBTOTAL - SIDING	41.23	/m2 GFA		2,488		3,738		6,226
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.08	374	4.73	851	6.81	1,226
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.85	185	4.63	463	5.76	576
	SUBTOTAL - ROOFING	12.40	/m2 GFA		559		1,314		1,873

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)									
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	452.53	3,801	452.53	3,801
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	618.08	1,483	618.08	1,483
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	11.15	3,925	11.15	3,925
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	8.44	1,426	8.44	1,426
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	31.78	4,799	0.00	0	31.78	4,799
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.44	25	0.90	50	1.34	75

1987 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	8.10	16	15.49	31	23.59	47
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	520.00	520	638.00	638	1,158.00	1,158
	SUBTOTAL - CARPENTRY (ROUGH)		110.70	/m2 GFA		5,360		11,355		16,715
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	93.00	93	73.00	73	166.00	166
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	96.00	96	92.00	92	188.00	188
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	97.00	97	107.00	107	204.00	204
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.33	17	8.56	34	12.89	52

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	64.90	130	142.00	284	206.90	414
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.55	560	1.34	484	2.89	1,043
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	30.90	62	45.75	92	76.65	153
	SUBTOTAL - CARPENTRY (FINISH)	14.70	/m2 GFA		1,054		1,165		2,219
	8. WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	621.00	621	621.00	621
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	270.00	1,620	270.00	1,620
	- 900 x 1550 mm	2	No.	0.00	0	323.00	646	323.00	646
	SUBTOTAL - WINDOWS AND GLAZING	19.12	/m2 GFA		0		2,887		2,887

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.24	26	0.14	15	0.38	41
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.19	18	0.62	9	1.81	27
SUBTOTAL - SEALANTS	0.46	/m2 GFA		44		25		69
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	29.00	29	315.00	315	344.00	344
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	29.00	29	170.00	170	199.00	199
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	72.00	72	1,025.00	1,025	1,097.00	1,097
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	118.50	119	592.00	592	710.50	711

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	13.90	14	48.99	49	62.89	63
- 711 x 2080 mm	3	No.	13.90	42	48.99	147	62.89	189
- 762 x 2080 mm	6	No.	13.90	83	48.99	294	62.89	377
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	11.10	11	41.99	42	53.09	53
- 1220 x 2080 mm	3	No.	11.10	33	72.94	219	84.04	252
- 1320 x 2080 mm	1	No.	11.10	11	78.64	79	89.74	90
- 1524 x 2080 mm	1	No.	11.10	11	84.34	84	95.44	95
- 1830 x 2080 mm	1	No.	11.10	11	98.02	98	109.12	109
SUBTOTAL - DOORS	23.70	/m2 GFA		465		3,114		3,579
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	18.55	37	31.88	64	50.43	101
11.20 Security deadbolt.	1	No.	18.55	19	33.60	34	52.15	52
11.30 Latch sets.	7	sets	9.30	65	14.20	99	23.50	165
11.40 Bathroom privacy latch sets.	3	sets	9.30	28	16.20	49	25.50	77
11.60 Door stops.	11	No.	2.35	26	1.80	20	4.15	46
SUBTOTAL - HARDWARE	2.91	/m2 GFA		175		265		440

12. Ceramic Tile NA (included in plumbing).

91-00430 Alberta house cost comparison study : single- 34112.008
detached dwelling
MICROLOG 1989 2/3

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.60	2,279	2.46	1,557	6.06	3,836
13.40 Finish to ceilings - textured.	138	m2	2.00	276	1.36	188	3.36	464
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.90	153	4.33	736	5.23	889
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.44	128	6.08	541	7.52	669
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.35	91	0.32	83	0.67	174
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.35	24	0.24	16	0.59	40
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.77	52	2.22	151	2.99	203
SUBTOTAL - WALLBOARD	41.56	/m2 GFA		3,003		3,272		6,275

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.30	132	11.94	251	18.24	383
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.75	398	25.56	2,709	29.31	3,107
SUBTOTAL - FLOORING	23.11	/m2 GFA		530		2,960		3,490
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	5.27	42	1.30	10	6.57	53
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	76.00	76	21.59	22	97.59	98
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	5.27	111	1.30	27	6.57	138
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.32	1,046	0.70	316	3.02	1,362
15.30 Two coats semigloss on internal doors and frames.	10	No.	27.40	274	6.26	63	33.66	337

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	34.58	242	8.10	57	42.68	299
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.95	183	0.25	48	1.20	232
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.95	4	0.25	1	1.20	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.91	6	1.29	3	4.20	8
15.43 Stain finish to cedar deck.	14	m2	3.31	46	0.95	13	4.26	60
15.44 Stain finish to deck handrail and balustrade.	16	m	4.69	75	1.72	28	6.41	103
SUBTOTAL - PAINTING	17.83	/m2 GFA		2,106		587		2,693
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.76	75	5.99	120	9.75	195
16.20 Vanities and base cabinets.	7	m	40.20	281	455.00	3,185	495.20	3,466
16.21 Kitchen wall cabinets.	4	m	40.20	161	256.00	1,024	296.20	1,185
SUBTOTAL - FITTINGS	32.09	/m2 GFA		517		4,329		4,846

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.40	58	9.10	82	15.50	140
17.20 Medicine cabinets	2	No.	12.75	26	63.45	127	76.20	152
17.25 Mirrors	2	No.	12.75	26	82.50	165	95.25	191
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.95	14	7.30	15	14.25	29
17.40 Mail box and house numbers	1	set	6.95	7	31.63	32	38.58	39
17.50 18 mm dia. chrome coat rods.	6	No.	4.65	28	5.82	35	10.47	63
SUBTOTAL - SPECIALTIES	4.05	/m2 GFA		157		455		612
18. APPLIANCES								
18.10 Range hood	1	No.	20.60	21	111.00	111	131.60	132
SUBTOTAL - APPLIANCES	0.87	/m2 GFA		21		111		132

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,515.00	2,515	3,820.00	3,820	6,335.00	6,335
SUBTOTAL - PLUMBING	41.95	/m2 GFA		2,515		3,820		6,335
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	835.00	835	2,435.00	2,435	3,270.00	3,270
SUBTOTAL - HEATING	21.66	/m2 GFA		835		2,435		3,270

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

FORT McMURRAY

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,330.00	1,330	1,935.00	1,935	3,265.00	3,265
SUBTOTAL - ELECTRICAL	28.25	/m2 GFA		1,330		2,935		4,265
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - FORT McMURRAY	582.09	/m2 GFA		$25,307		$62,589		$87,896

DETAILED COST ESTIMATES FOR GRANDE PRAIRIE

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.65	193	1.07	318	1.72	511
1.11	Excavate trench for garage grade beam.	4	m3	4.35	17	7.15	29	11.50	46
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.96	71	1.12	83	2.08	154
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.47	87	12.22	306	15.69	392
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.03	169	0.33	54	1.36	223
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	8.25	1,840	8.25	1,840
	SUBTOTAL - EXCAVATION	20.97	/m2 GFA		537		2,629		3,166
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	127.10	2,415	127.10	2,415

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	127.10	127	127.10	127
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	16.30	342	37.54	788	53.84	1,131
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.84	219	0.84	219
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.84	30	0.84	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.40	104	1.40	104
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	25.37	1,015	12.57	503	37.94	1,518
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.93	232	5.05	131	13.98	363
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.66	329	9.22	830	12.88	1,159
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.64	343	13.20	977	17.84	1,320

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	25.50	26	230.00	230	255.50	256
2.60	Parging to concrete walls.	10	m2	9.95	100	4.60	46	14.55	146
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	657.00	657	1,780.00	1,780	2,437.00	2,437
	SUBTOTAL - CONCRETE	74.33	/m2 GFA		3,044		8,180		11,224
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.40	51	0.39	50	0.79	100
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	6.62	298	4.59	207	11.21	504
	SUBTOTAL - DAMPROOFING	4.01	/m2 GFA		349		256		605

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	6.90	1,028	14.33	2,135	21.23	3,163
4.20	Prefinished perforated aluminum soffit.	44	m2	6.20	273	10.82	476	17.02	749
4.30	Prefinished aluminum fascia.	70	m	1.17	82	2.80	196	3.97	278
4.40	Brick facing to front elevation.	20	m2	50.68	1,014	43.76	875	94.44	1,889
	SUBTOTAL - SIDING	40.25	/m2 GFA		2,396		3,682		6,078
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.24	403	4.88	878	7.12	1,282
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.87	187	4.68	468	6.55	655
	SUBTOTAL - ROOFING	12.82	/m2 GFA		590		1,346		1,936

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	442.70	3,719	442.70	3,719
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	603.20	1,448	603.20	1,448
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	9.82	3,457	9.82	3,457
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	6.49	1,097	6.49	1,097
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	30.07	4,541	0.00	0	30.07	4,541
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.47	26	0.91	51	1.38	77

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	8.74	17	15.50	31	24.24	48
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	505.00	505	627.00	627	1,132.00	1,132
	SUBTOTAL - CARPENTRY (ROUGH)		102.77	/m2 GFA		5,089		10,429		15,518
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	87.00	87	63.50	64	150.50	151
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	89.00	89	80.00	80	169.00	169
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	90.00	90	92.00	92	182.00	182
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.62	18	8.31	33	12.93	52

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	60.00	120	126.50	253	186.50	373
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.58	570	1.23	444	2.81	1,014
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	28.35	57	39.60	79	67.95	136
	SUBTOTAL - CARPENTRY (FINISH)	13.75	/m2 GFA		1,032		1,045		2,077
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	622.00	622	622.00	622
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	265.00	1,590	265.00	1,590
	- 900 x 1550 mm	2	No.	0.00	0	324.00	648	324.00	648
	SUBTOTAL - WINDOWS AND GLAZING	18.94	/m2 GFA		0		2,860		2,860

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.25	27	0.14	15	0.39	43
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.22	18	0.61	9	1.83	27
SUBTOTAL - SEALANTS	0.46	/m2 GFA		46		24		70
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	27.30	27	341.25	341	368.55	369
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	27.30	27	183.75	184	211.05	211
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	68.25	68	1,081.50	1,082	1,149.75	1,150
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	115.50	116	630.00	630	745.50	746

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	14.20	14	49.30	49	63.50	64
- 711 x 2080 mm	3	No.	14.20	43	49.30	148	63.50	191
- 762 x 2080 mm	6	No.	14.20	85	49.30	296	63.50	381
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	12.10	12	46.60	47	58.70	59
- 1220 x 2080 mm	3	No.	12.10	36	80.85	243	92.95	279
- 1320 x 2080 mm	1	No.	12.10	12	86.92	87	99.02	99
- 1524 x 2080 mm	1	No.	12.10	12	93.22	93	105.32	105
- 1830 x 2080 mm	1	No.	12.10	12	108.34	108	120.44	120
SUBTOTAL - DOORS	24.98	/m2 GFA		465		3,307		3,772
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	18.40	37	30.45	61	48.85	98
11.20 Security deadbolt.	1	No.	18.40	18	32.54	33	50.94	51
11.30 Latch sets.	7	sets	9.20	64	13.65	96	22.85	160
11.40 Bathroom privacy latch sets.	3	sets	9.20	28	15.75	47	24.95	75
11.60 Door stops.	11	No.	2.21	24	1.75	19	3.96	44
SUBTOTAL - HARDWARE	2.83	/m2 GFA		172		255		427

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRA RIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.02	1,912	2.38	1,507	5.40	3,418
13.40 Finish to ceilings - textured.	138	m2	1.47	203	1.28	177	2.75	380
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.93	158	4.20	714	5.13	872
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.56	139	7.51	668	9.07	807
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.36	93	0.33	85	0.69	179
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.36	24	0.25	17	0.61	41
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.77	52	2.20	150	2.97	202
SUBTOTAL - WALLBOARD	39.07	/m2 GFA		2,582		3,318		5,900

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.80	143	12.66	266	19.46	409
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.88	411	28.80	3,053	32.68	3,464
SUBTOTAL - FLOORING	25.65	/m2 GFA		554		3,319		3,873
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	5.54	44	1.33	11	6.87	55
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	73.50	74	23.10	23	96.60	97
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	5.54	116	1.33	28	6.87	144
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.36	1,064	0.74	334	3.10	1,398
15.30 Two coats semigloss on internal doors and frames.	10	No.	28.35	284	6.45	65	34.80	348

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35	Two coats semigloss on bi-fold doors.	7	No.	36.50	256	8.37	59	44.87	314
15.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.00	193	0.26	50	1.26	243
15.41	Prepare, prime, one coat semigloss on handrails.	4	m	1.00	4	0.26	1	1.26	5
15.42	Prepare, prime, one coat semigloss on balustrade.	2	m	3.23	6	1.22	2	4.45	9
15.43	Stain finish to cedar deck.	14	m2	3.54	50	0.85	12	4.39	61
15.44	Stain finish to deck handrail and balustrade.	16	m	5.57	89	1.73	28	7.30	117
	SUBTOTAL - PAINTING	18.49	/m2 GFA		2,180		612		2.792
16.	FITTINGS								
16.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.99	80	5.73	115	9.72	194
16.20	Vanities and base cabinets.	7	m	39.90	279	410.00	2,870	449.90	3,149
16.21	Kitchen wall cabinets.	4	m	39.90	160	232.00	928	271.90	1,088
	SUBTOTAL - FITTINGS	29.35	/m2 GFA		519		3,913		4,432

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.46	58	9.87	89	16.33	147
17.20 Medicine cabinets	2	No.	12.60	25	65.94	132	78.54	157
17.25 Mirrors	2	No.	12.60	25	84.00	168	96.60	193
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.85	14	7.27	15	14.12	28
17.40 Mail box and house numbers	1	set	6.85	7	33.55	34	40.40	40
17.50 18 mm dia. chrome coat rods.	6	No.	4.25	26	6.16	37	10.41	62
SUBTOTAL - SPECIALTIES	4.17	/m2 GFA		155		474		629
18. APPLIANCES								
18.10 Range hood	1	No.	21.00	21	118.00	118	139.00	139
SUBTOTAL - APPLIANCES	0.92	/m2 GFA		21		118		139

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,390.00	2,390	3,830.00	3,830	6,220.00	6,220
SUBTOTAL - PLUMBING	41.19	/m2 GFA		2,390		3,830		6,220
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	800.00	800	2,415.00	2,415	3,215.00	3,215
SUBTOTAL - HEATING	21.29	/m2 GFA		800		2,415		3,215

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

GRANDE PRAIRIE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL							
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1 house	0.00	0	1,000.00	1,000	1,000.00	1,000
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1 house	1,210.00	1,210	1,890.00	1,890	3,100.00	3,100
SUBTOTAL - ELECTRICAL	27.15 /m2 GFA		1,210		2,890		4,100
22. SITE OVERHEAD							
22.10 Site Overhead (Allowance)	1 house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42 /m2 GFA		0		5,500		5,500
TOTAL - GRANDE PRAIRIE	559.82 /m2 GFA		$24,131		$60,402		$84,533

DETAILED COST ESTIMATES FOR HINTON

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.52	154	0.99	294	1.51	448
1.11	Excavate trench for garage grade beam.	4	m3	3.45	14	7.33	29	10.78	43
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.01	75	1.48	110	2.49	184
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.74	94	6.84	171	10.58	265
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.98	161	0.32	52	1.30	213
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	7.92	1,766	7.92	1,766
	SUBTOTAL - EXCAVATION	19.34	/m2 GFA		497		2,423		2,920
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	123.49	2,346	123.49	2,346

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	123.49	123	123.49	123
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	17.05	358	36.32	763	53.37	1,121
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.84	219	0.84	219
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.84	30	0.84	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.26	93	1.26	93
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	31.69	1,268	14.09	564	45.78	1,831
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	11.75	306	5.73	149	17.48	454
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	4.24	382	8.77	789	13.01	1,171
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.32	394	12.40	918	17.72	1,311

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	24.20	24	260.00	260	284.20	284
2.60	Parging to concrete walls.	10	m2	10.08	101	3.76	38	13.84	138
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	682.00	682	1,610.00	1,610	2,292.00	2,292
	SUBTOTAL - CONCRETE	75.60	/m2 GFA		3,513		7,902		11,415
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.33	42	0.32	41	0.65	83
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.98	224	4.28	193	9.26	417
	SUBTOTAL - DAMPROOFING	3.30	/m2 GFA		266		233		499

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	7.92	1,180	11.07	1,649	18.99	2,830
4.20	Prefinished perforated aluminum soffit.	44	m2	4.32	190	10.60	466	14.92	656
4.30	Prefinished aluminum fascia.	70	m	0.91	64	2.39	167	3.30	231
4.40	Brick facing to front elevation.	20	m2	55.39	1,108	45.53	911	100.92	2,018
	SUBTOTAL - SIDING	37.99	/m2 GFA		2,542		3,194		5,736
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.07	373	4.57	823	6.64	1,195
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.95	195	3.45	345	5.76	576
	SUBTOTAL - ROOFING	11.50	/m2 GFA		568		1,168		1,736

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

6. CARPENTRY (ROUGH)

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	423.73	3,559	423.73	3,559
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	578.75	1,389	578.75	1,389
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	9.50	3,344	9.50	3,344
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	7.20	1,217	7.20	1,217
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	30.29	4,574	0.00	0	30.29	4,574
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.42	24	0.86	48	1.28	72

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	8.91	18	14.50	29	23.41	47
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	540.00	540	645.00	645	1,185.00	1,185
	SUBTOTAL - CARPENTRY (ROUGH)		101.89	/m2 GFA		5,155		10,231		15,386
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	85.00	85	66.00	66	151.00	151
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	87.00	87	83.00	83	170.00	170
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	88.00	88	97.00	97	185.00	185
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.76	19	8.56	34	13.32	53

1989 ALBERTA HOUSE COST COMPARISON STUDY   SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA :   151 m2

HINTON

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	63.00	126	130.00	260	193.00	386
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.32	477	1.25	451	2.57	928
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	27.50	55	40.50	81	68.00	136
	SUBTOTAL - CARPENTRY (FINISH)	13.30	/m2 GFA		937		1,072		2,009
8. WINDOWS AND GLAZING									
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	565.00	565	565.00	565
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	246.00	1,476	246.00	1,476
	- 900 x 1550 mm	2	No.	0.00	0	295.00	590	295.00	590
	SUBTOTAL - WINDOWS AND GLAZING	17.42	/m2 GFA		0		2,631		2,631

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.22	24	0.12	13	0.34	37
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.21	18	0.59	9	1.80	27
SUBTOTAL - SEALANTS	0.42	/m2 GFA		42		22		64
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	27.50	28	318.00	318	345.50	346
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	27.50	28	172.00	172	199.50	200
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	73.00	73	1,011.00	1,011	1,084.00	1,084
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	121.00	121	594.00	594	715.00	715

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	13.50	14	46.50	47	60.00	60
- 711 x 2080 mm	3	No.	13.50	41	46.50	140	60.00	180
- 762 x 2080 mm	6	No.	13.50	81	46.50	279	60.00	360
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	11.00	11	39.95	40	50.95	51
- 1220 x 2080 mm	3	No.	11.00	33	69.10	207	80.10	240
- 1320 x 2080 mm	1	No.	11.00	11	74.50	75	85.50	86
- 1524 x 2080 mm	1	No.	11.00	11	79.90	80	90.90	91
- 1830 x 2080 mm	1	No.	11.00	11	92.86	93	103.86	104
SUBTOTAL - DOORS	23.28	/m2 GFA		461		3,055		3,516
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	17.60	35	30.45	61	48.05	96
11.20 Security deadbolt.	1	No.	17.60	18	32.55	33	50.15	50
11.30 Latch sets.	7	sets	9.00	63	13.65	96	22.65	159
11.40 Bathroom privacy latch sets.	3	sets	9.00	27	15.75	47	24.75	74
11.60 Door stops.	11	No.	2.25	25	1.75	19	4.00	44
SUBTOTAL - HARDWARE	2.81	/m2 GFA		168		256		424

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.30	2,089	2.48	1,570	5.78	3,659
13.40 Finish to ceilings - textured.	138	m2	1.36	188	1.26	174	2.62	362
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.91	155	4.20	714	5.11	869
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.27	113	5.74	511	7.01	624
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.30	78	0.32	83	0.62	161
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.30	20	0.22	15	0.52	35
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.70	48	2.15	146	2.85	194
SUBTOTAL - WALLBOARD	39.09	/m2 GFA		2,690		3,213		5,903

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.19	130	12.54	263	18.73	393
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.67	389	25.85	2,740	29.52	3,129
SUBTOTAL - FLOORING	23.32	/m2 GFA		519		3,003		3,522
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	5.06	40	1.26	10	6.32	51
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	74.00	74	21.72	22	95.72	96
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	5.06	106	1.26	26	6.32	133
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.42	1,091	0.74	334	3.16	1,425
15.30 Two coats semigloss on internal doors and frames.	10	No.	28.05	281	6.31	63	34.36	344

1989 ALBERTA HOUSE COST COMPARISON STUDY   SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA :   151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	30.91	216	8.19	57	39.10	274
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.98	189	0.24	46	1.22	235
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.98	4	0.24	1	1.22	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	3.01	6	1.12	2	4.13	8
15.43 Stain finish to cedar deck.	14	m2	3.44	48	0.84	12	4.28	60
15.44 Stain finish to deck handrail and balustrade.	16	m	5.43	87	1.67	27	7.10	114
SUBTOTAL - PAINTING	18.17	/m2 GFA		2,143		600		2,743
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.02	80	5.88	118	9.90	198
16.20 Vanities and base cabinets.	7	m	37.95	266	405.00	2,835	442.95	3,101
16.21 Kitchen wall cabinets.	4	m	37.95	152	229.00	916	266.95	1,068
SUBTOTAL - FITTINGS	28.92	/m2 GFA		498		3,869		4,367

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.05	54	9.24	83	15.29	138
17.20 Medicine cabinets	2	No.	12.10	24	61.90	124	74.00	148
17.25 Mirrors	2	No.	12.10	24	78.75	158	90.85	182
17.30 25 mm dia. chrome shower curtain rods.	2	No.	7.15	14	6.81	14	13.96	28
17.40 Mail box and house numbers	1	set	7.15	7	31.48	31	38.63	39
17.50 18 mm dia. chrome coat rods.	6	No.	3.85	23	5.05	30	8.90	53
SUBTOTAL - SPECIALTIES	3.89	/m2 GFA		147		440		587
18. APPLIANCES								
18.10 Range hood	1	No.	19.25	19	103.95	104	123.20	123
SUBTOTAL - APPLIANCES	0.81	/m2 GFA		19		104		123

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1 house	2,500.00	2,500	3,700.00	3,700	6,200.00	6,200
SUBTOTAL - PLUMBING	41.06 /m2 GFA		2,500		3,700		6,200
20. HEATING							
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1 house	750.00	750	2,400.00	2,400	3,150.00	3,150
SUBTOTAL - HEATING	20.86 /m2 GFA		750		2,400		3,150

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

HINTON

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,450.00	1,450	1,850.00	1,850	3,300.00	3,300
SUBTOTAL - ELECTRICAL	28.15	/m2 GFA		1,450		2,800		4,250
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - HINTON	547.56	/m2 GFA		$24,865		$57,816		$82,681

DETAILED COST ESTIMATES FOR LETHBRIDGE

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.45	134	1.46	434	1.91	567
1.11	Excavate trench for garage grade beam.	4	m3	3.04	12	9.49	38	12.53	50
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.86	64	1.68	124	2.54	188
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.33	83	12.21	305	15.54	389
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.93	153	0.30	49	1.23	202
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	8.77	1,956	8.77	1,956
	SUBTOTAL - EXCAVATION	22.19	/m2 GFA		445		2,906		3,351
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	89.70	1,704	89.70	1,704

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	89.70	90	89.70	90
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	13.73	288	31.40	659	45.13	948
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.80	209	0.80	209
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.80	29	0.80	29
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.20	89	1.20	89
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	25.90	1,036	13.19	528	39.09	1,564
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.07	236	5.39	140	14.46	376
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.67	330	6.38	574	10.05	905
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.61	341	9.24	684	13.85	1,025

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	23.92	24	220.00	220	243.92	244
2.60	Parging to concrete walls.	10	m2	9.67	97	2.95	30	12.62	126
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	820.00	820	1,950.00	1,950	2,770.00	2,770
	SUBTOTAL - CONCRETE	66.74	/m2 GFA		3,172		6,905		10,077
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.35	44	0.31	39	0.66	84
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.78	215	4.20	189	8.98	404
	SUBTOTAL - DAMPROOFING	3.23	/m2 GFA		260		228		488

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING								
4.10 100 mm vinyl siding including building paper.	149	m2	5.28	787	13.06	1,946	18.34	2,733
4.20 Prefinished perforated aluminum soffit.	44	m2	4.80	211	10.18	448	14.98	659
4.30 Prefinished aluminum fascia.	70	m	1.51	106	2.89	202	4.40	308
4.40 Brick facing to front elevation.	20	m2	49.39	988	40.61	812	90.00	1,800
SUBTOTAL - SIDING	36.42	/m2 GFA		2,091		3,408		5,499
5. ROOFING								
5.10 Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.59	466	4.36	785	6.95	1,251
5.20 Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.85	185	3.70	370	5.76	576
SUBTOTAL - ROOFING	11.96	/m2 GFA		651		1,155		1,806

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)								
6.10 Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	466.10	3,915	466.10	3,915
6.20 Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	636.60	1,528	636.60	1,528
6.30 Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	9.16	3,224	9.16	3,224
6.35 Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	6.93	1,171	6.93	1,171
6.40 Labour Only - complete house framing including trusses and window installation.	151	m2	27.90	4,213	0.00	0	27.90	4,213
6.50 Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.42	24	0.89	50	1.31	73

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.09	14	16.50	33	23.59	47
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	463.00	463	715.00	715	1,178.00	1,178
	SUBTOTAL - CARPENTRY (ROUGH)		101.66	/m2 GFA		4,714		10,636		15,350
	7. CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	80.00	80	76.00	76	156.00	156
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	83.00	83	95.00	95	178.00	178
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	85.00	85	110.00	110	195.00	195
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.47	18	8.65	35	13.12	52

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	58.25	117	145.00	290	203.25	407
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.27	458	1.39	502	2.66	960
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	26.00	52	45.76	92	71.76	144
	SUBTOTAL - CARPENTRY (FINISH)	13.85	/m2 GFA		893		1,199		2,092
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	562.00	562	562.00	562
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	246.00	1,476	246.00	1,476
	- 900 x 1550 mm	2	No.	0.00	0	293.00	586	293.00	586
	SUBTOTAL - WINDOWS AND GLAZING	17.38	/m2 GFA		0		2,624		2,624

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.21	23	0.11	12	0.32	35
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.14	17	0.58	9	1.72	26
SUBTOTAL - SEALANTS	0.40	/m2 GFA		40		21		61
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	26.00	26	304.00	304	330.00	330
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	26.00	26	165.00	165	191.00	191
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	64.50	65	986.00	986	1,050.50	1,051
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	104.00	104	594.00	594	698.00	698

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.00	12	41.99	42	53.99	54
- 711 x 2080 mm	3	No.	12.00	36	41.99	126	53.99	162
- 762 x 2080 mm	6	No.	12.00	72	41.99	252	53.99	324
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	10.00	10	41.99	42	51.99	52
- 1220 x 2080 mm	3	No.	10.00	30	72.59	218	82.59	248
- 1320 x 2080 mm	1	No.	10.00	10	78.25	78	88.25	88
- 1524 x 2080 mm	1	No.	10.00	10	83.90	84	93.90	94
- 1830 x 2080 mm	1	No.	10.00	10	97.50	98	107.50	108
SUBTOTAL - DOORS	22.51	/m2 GFA		411		2,988		3,399
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.65	33	32.25	65	48.90	98
11.20 Security deadbolt.	1	No.	16.65	17	34.85	35	51.50	52
11.30 Latch sets.	7	sets	9.40	66	14.50	102	23.90	167
11.40 Bathroom privacy latch sets.	3	sets	9.40	28	16.70	50	26.10	78
11.60 Door stops.	11	No.	2.10	23	1.82	20	3.92	43
SUBTOTAL - HARDWARE	2.90	/m2 GFA		167		271		438

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.70	1,709	2.29	1,450	4.99	3,159
13.40 Finish to ceilings - textured.	138	m2	1.38	190	1.29	178	2.67	368
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.05	179	4.49	763	5.54	942
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.36	121	5.86	522	7.22	643
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.36	93	0.30	78	0.66	171
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.36	24	0.24	16	0.60	41
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.66	45	2.21	150	2.87	195
SUBTOTAL - WALLBOARD	36.55 /m2 GFA			2,362		3,157		5,519

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.37	134	12.16	255	18.53	389
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.57	378	25.33	2,685	28.90	3,063
SUBTOTAL - FLOORING	22.86	/m2 GFA		512		2,940		3,452
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.62	37	1.27	10	5.89	47
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	71.50	72	21.61	22	93.11	93
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.62	97	1.27	27	5.89	124
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.48	1,118	0.74	334	3.22	1,452
15.30 Two coats semigloss on internal doors and frames.	10	No.	27.00	270	6.32	63	33.32	333

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	33.10	232	8.19	57	41.29	289
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.99	191	0.23	44	1.22	235
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.99	4	0.23	1	1.22	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.82	6	1.20	2	4.02	8
15.43 Stain finish to cedar deck.	14	m2	3.34	47	0.93	13	4.27	60
15.44 Stain finish to deck handrail and balustrade.	16	m	5.10	82	1.75	28	6.85	110
SUBTOTAL - PAINTING	18.25	/m2 GFA		2,155		601		2,756
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.02	80	6.52	130	10.54	211
16.20 Vanities and base cabinets.	7	m	34.25	240	450.00	3,150	484.25	3,390
16.21 Kitchen wall cabinets.	4	m	34.25	137	254.00	1,016	288.25	1,153
SUBTOTAL - FITTINGS	31.48	/m2 GFA		457		4,296		4,753

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.72	60	9.24	83	15.96	144
17.20 Medicine cabinets	2	No.	12.50	25	66.72	133	79.22	158
17.25 Mirrors	2	No.	12.50	25	84.37	169	96.87	194
17.30 25 mm dia. chrome shower curtain rods.	2	No.	4.91	10	6.93	14	11.84	24
17.40 Mail box and house numbers	1	set	6.24	6	27.15	27	33.39	33
17.50 18 mm dia. chrome coat rods.	6	No.	4.10	25	5.78	35	9.88	59
SUBTOTAL - SPECIALTIES	4.05	/m2 GFA		151		461		612
18. APPLIANCES								
18.10 Range hood	1	No.	18.75	19	115.50	116	134.25	134
SUBTOTAL - APPLIANCES	0.89	/m2 GFA		19		116		135

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1 house	2,055.00	2,055	3,635.00	3,635	5,690.00	5,690
SUBTOTAL - PLUMBING	37.68 /m2 GFA		2,055		3,635		5,690
20. HEATING							
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1 house	650.00	650	1,955.00	1,955	2,605.00	2,605
SUBTOTAL - HEATING	17.25 /m2 GFA		650		1,955		2,605

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LETHBRIDGE

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,345.00	1,345	1,825.00	1,825	3,170.00	3,170
SUBTOTAL - ELECTRICAL	27.28	/m2 GFA		1,345		2,775		4,120
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - LETHBRIDGE	531.97	/m2 GFA		$22,550		$57,777		$80,327

DETAILED COST ESTIMATES FOR MEDICINE HAT

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.61	181	1.02	303	1.63	484
1.11	Excavate trench for garage grade beam.	4	m3	4.07	16	7.54	30	11.61	46
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.75	56	1.06	78	1.81	134
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.46	87	9.89	247	13.35	334
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.95	156	0.29	48	1.24	203
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	8.75	1,951	8.75	1,951
	SUBTOTAL - EXCAVATION	20.88	/m2 GFA		495		2,658		3,153
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	104.95	1,994	104.95	1,994

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	104.95	105	104.95	105
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	15.52	326	36.42	765	51.94	1,091
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.82	214	0.82	214
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.82	30	0.82	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.24	92	1.24	92
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	30.69	1,228	13.39	536	44.08	1,763
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.72	279	5.45	142	16.17	420
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	4.10	369	7.45	671	11.55	1,040
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.14	380	10.76	796	15.90	1,177

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	25.68	26	232.00	232	257.68	258
2.60	Parging to concrete walls.	10	m2	10.29	103	3.30	33	13.59	136
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	700.00	700	1,885.00	1,885	2,585.00	2,585
	SUBTOTAL - CONCRETE	72.21	/m2 GFA		3,410		7,493		10,903
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.39	50	0.33	42	0.72	91
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.18	188	4.54	204	8.72	392
	SUBTOTAL - DAMPROOFING	3.21	/m2 GFA		238		246		484

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4.	SIDING								
4.10	100 mm vinyl siding including building paper.	149	m2	5.12	763	12.28	1,830	17.40	2,593
4.20	Prefinished perforated aluminum soffit.	44	m2	4.60	202	14.27	628	18.87	830
4.30	Prefinished aluminum fascia.	70	m	1.53	107	2.83	198	4.36	305
4.40	Brick facing to front elevation.	20	m2	48.42	968	39.43	789	87.85	1,757
	SUBTOTAL - SIDING	36.32	/m2 GFA		2,041		3,444		5,485
5.	ROOFING								
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.82	508	4.42	796	7.24	1,303
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.77	177	3.74	374	5.76	576
	SUBTOTAL - ROOFING	12.28	/m2 GFA		685		1,170		1,855

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.	CARPENTRY (ROUGH)								
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	452.53	3,801	452.53	3,801
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	618.10	1,483	618.10	1,483
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.91	3,136	8.91	3,136
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	6.74	1,139	6.74	1,139
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	23.26	3,512	0.00	0	23.26	3,512
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.43	24	0.93	52	1.36	76

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.54	15	15.40	31	22.94	46
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	480.00	480	677.00	677	1,157.00	1,157
	SUBTOTAL - CARPENTRY (ROUGH)		95.04	/m2 GFA		4,031		10,320		14,351
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	85.00	85	70.50	71	155.50	156
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	87.00	87	88.00	88	175.00	175
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	88.00	88	103.50	104	191.50	192
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.25	17	8.78	35	13.03	52

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	62.00	124	143.00	286	205.00	410
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.28	462	1.34	484	2.62	946
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	27.90	56	44.55	89	72.45	145
	SUBTOTAL - CARPENTRY (FINISH)	13.74	/m2 GFA		919		1,156		2,075
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	573.00	573	573.00	573
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	252.00	1,512	252.00	1,512
	- 900 x 1550 mm	2	No.	0.00	0	299.00	598	299.00	598
	SUBTOTAL - WINDOWS AND GLAZING	17.77	/m2 GFA		0		2,683		2,683

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.24	26	0.11	12	0.35	38
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.21	18	0.59	9	1.80	27
SUBTOTAL - SEALANTS	0.43	/m2 GFA		44		21		65
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	26.25	26	297.00	297	323.25	323
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	26.25	26	165.00	165	191.25	191
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	68.50	69	1,018.00	1,018	1,086.50	1,087
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	107.00	107	562.00	562	669.00	669

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	13.40	13	41.99	42	55.39	55
- 711 x 2080 mm	3	No.	13.40	40	41.99	126	55.39	166
- 762 x 2080 mm	6	No.	13.40	80	41.99	252	55.39	332
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	11.25	11	39.85	40	51.10	51
- 1220 x 2080 mm	3	No.	11.25	34	67.20	202	78.45	235
- 1320 x 2080 mm	1	No.	11.25	11	72.45	72	83.70	84
- 1524 x 2080 mm	1	No.	11.25	11	77.69	78	88.94	89
- 1830 x 2080 mm	1	No.	11.25	11	90.30	90	101.55	102
SUBTOTAL - DOORS	22.42	/m2 GFA		441		2,944		3,385
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	17.70	35	30.45	61	48.15	96
11.20 Security deadbolt.	1	No.	17.70	18	33.25	33	50.95	51
11.30 Latch sets.	7	sets	9.65	68	13.65	96	23.30	163
11.40 Bathroom privacy latch sets.	3	sets	9.65	29	15.75	47	25.40	76
11.60 Door stops.	11	No.	2.40	26	1.75	19	4.15	46
SUBTOTAL - HARDWARE	2.86	/m2 GFA		176		256		432

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.75	1,741	2.24	1,418	4.99	3,159
13.40 Finish to ceilings - textured.	138	m2	1.43	197	1.31	181	2.74	378
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.07	182	4.41	750	5.48	932
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.40	125	5.80	516	7.20	641
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.37	96	0.29	75	0.66	171
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.37	25	0.23	16	0.60	41
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.72	49	2.74	186	3.46	235
SUBTOTAL - WALLBOARD	36.80	/m2 GFA		2,415		3,142		5,557

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.52	137	12.57	264	19.09	401
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.23	448	26.46	2,805	30.69	3,253
SUBTOTAL - FLOORING	24.20	/m2 GFA		585		3,069		3,654
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.92	39	1.37	11	6.29	50
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	72.50	73	23.15	23	95.65	96
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.92	103	1.37	29	6.29	132
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.42	1,091	0.74	334	3.16	1,425
15.30 Two coats semigloss on internal doors and frames.	10	No.	27.00	270	6.81	68	33.81	338

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	33.03	231	8.38	59	41.41	290
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.00	193	0.25	48	1.25	241
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	1.00	4	0.25	1	1.25	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	3.09	6	1.24	2	4.33	9
15.43 Stain finish to cedar deck.	14	m2	3.59	50	0.96	13	4.55	64
15.44 Stain finish to deck handrail and balustrade.	16	m	5.30	85	1.88	30	7.18	115
SUBTOTAL - PAINTING	18.31	/m2 GFA		2,146		619		2,765
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.50	90	6.29	126	10.79	216
16.20 Vanities and base cabinets.	7	m	38.31	268	435.00	3,045	473.31	3,313
16.21 Kitchen wall cabinets.	4	m	38.31	153	245.00	980	283.31	1,133
SUBTOTAL - FITTINGS	30.87	/m2 GFA		511		4,151		4,662

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.91	62	9.25	83	16.16	145
17.20 Medicine cabinets	2	No.	12.85	26	66.72	133	79.57	159
17.25 Mirrors	2	No.	12.85	26	84.37	169	97.22	194
17.30 25 mm dia. chrome shower curtain rods.	2	No.	5.05	10	6.93	14	11.98	24
17.40 Mail box and house numbers	1	set	6.45	6	27.15	27	33.60	34
17.50 18 mm dia. chrome coat rods.	6	No.	4.25	26	5.78	35	10.03	60
SUBTOTAL - SPECIALTIES	4.09	/m2 GFA		156		461		617
18. APPLIANCES								
18.10 Range hood	1	No.	19.30	19	115.50	116	134.80	135
SUBTOTAL - APPLIANCES	0.89	/m2 GFA		19		116		135

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1 house	2,215.00	2,215	3,600.00	3,600	5,815.00	5,815
SUBTOTAL - PLUMBING	38.51 /m2 GFA		2,215		3,600		5,815
20. HEATING							
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1 house	800.00	800	2,205.00	2,205	3,005.00	3,005
SUBTOTAL - HEATING	19.90 /m2 GFA		800		2,205		3,005

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

MEDICINE HAT

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL								
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,435.00	1,435	1,980.00	1,980	3,415.00	3,415
SUBTOTAL - ELECTRICAL	28.91	/m2 GFA		1,435		2,930		4,365
22. SITE OVERHEAD								
22.10 Site Overhead (Allowance)	1	house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42	/m2 GFA		0		5,500		5,500
TOTAL - MEDICINE HAT	536.07	/m2 GFA		$22,762		$58,184		$80,946

DETAILED COST ESTIMATES FOR LLOYDMINSTER

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION									
1.10	Excavate for basement, wall footings, and bases.	297	m3	0.43	128	1.58	469	2.01	597
1.11	Excavate trench for garage grade beam.	4	m3	3.08	12	9.81	39	12.89	52
1.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.79	58	1.70	126	2.49	184
1.30	150 mm gravel or sand bed under slab on grade.	25	m3	3.15	79	10.60	265	13.75	344
1.40	4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.89	146	0.32	52	1.21	198
1.50	Remove surplus excavated material off site.	223	m3	0.00	0	9.32	2,078	9.32	2,078
	SUBTOTAL - EXCAVATION	22.87	/m2 GFA		423		3,030		3,453
2. CONCRETE									
2.10	20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	113.02	2,147	113.02	2,147

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	113.02	113	113.02	113
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	13.25	278	39.58	831	52.83	1,109
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.86	224	0.86	224
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.86	31	0.86	31
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.28	95	1.28	95
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	24.90	996	12.65	506	37.55	1,502
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.69	226	5.13	133	13.82	359
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.34	301	6.76	608	10.10	909
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.20	311	9.81	726	14.01	1,037

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	22.00	22	225.00	225	247.00	247
2.60	Parging to concrete walls.	10	m2	8.90	89	3.68	37	12.58	126
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	572.00	572	1,880.00	1,880	2,452.00	2,452
	SUBTOTAL - CONCRETE	68.56	/m2 GFA		2,795		7,557		10,352
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.29	37	0.29	37	0.58	74
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	3.60	162	4.64	209	8.24	371
	SUBTOTAL - DAMPROOFING	2.95	/m2 GFA		199		246		445

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING									
4.10	100 mm vinyl siding including building paper.	149	m2	5.88	876	13.11	1,953	18.99	2,830
4.20	Prefinished perforated aluminum soffit.	44	m2	5.38	237	11.95	526	17.33	763
4.30	Prefinished aluminum fascia.	70	m	0.98	69	2.69	188	3.67	257
4.40	Brick facing to front elevation.	20	m2	46.42	928	42.21	844	88.63	1,773
	SUBTOTAL - SIDING	37.23	/m2 GFA		2,110		3,512		5,622
5. ROOFING									
5.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	1.72	310	4.23	761	5.95	1,071
5.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.57	157	3.60	360	5.76	576
	SUBTOTAL - ROOFING	10.52	/m2 GFA		467		1,121		1,588

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)									
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	436.10	3,663	436.10	3,663
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	595.60	1,429	595.60	1,429
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	9.53	3,355	9.53	3,355
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	6.49	1,097	6.49	1,097
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	23.54	3,555	0.00	0	23.54	3,555
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.39	22	0.93	52	1.32	74

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	7.00	14	14.20	28	21.20	42
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	419.00	419	670.00	670	1,089.00	1,089
	SUBTOTAL - CARPENTRY (ROUGH)		94.73 /m2 GFA			4,009		10,295		14,304
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	75.00	75	69.00	69	144.00	144
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	77.00	77	86.00	86	163.00	163
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	78.00	78	101.00	101	179.00	179
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	3.84	15	9.22	37	13.06	52

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	55.00	110	138.00	276	193.00	386
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.30	469	1.36	491	2.66	960
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	25.00	50	44.13	88	69.13	138
	SUBTOTAL - CARPENTRY (FINISH)	13.40	/m2 GFA		875		1,148		2,023
	8. WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	579.00	579	579.00	579
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	253.00	1,518	253.00	1,518
	- 900 x 1550 mm	2	No.	0.00	0	302.00	604	302.00	604
	SUBTOTAL - WINDOWS AND GLAZING	17.89	/m2 GFA		0		2,701		2,701

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.20	22	0.12	13	0.32	35
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.08	16	0.58	9	1.66	25
SUBTOTAL - SEALANTS	0.40	/m2 GFA		38		22		60
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	335.00	335	360.00	360
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	25.00	25	182.00	182	207.00	207
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	63.00	63	1,033.00	1,033	1,096.00	1,096
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	105.00	105	602.00	602	707.00	707

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	12.00	12	48.75	49	60.75	61
- 711 x 2080 mm	3	No.	12.00	36	48.75	146	60.75	182
- 762 x 2080 mm	6	No.	12.00	72	48.75	293	60.75	365
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	9.00	9	39.75	40	48.75	49
- 1220 x 2080 mm	3	No.	9.00	27	68.50	206	77.50	233
- 1320 x 2080 mm	1	No.	9.00	9	73.85	74	82.85	83
- 1524 x 2080 mm	1	No.	9.00	9	79.20	79	88.20	88
- 1830 x 2080 mm	1	No.	9.00	9	92.05	92	101.05	101
SUBTOTAL - DOORS	23.38	/m2 GFA		401		3,130		3,531
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	16.00	32	30.75	62	46.75	94
11.20 Security deadbolt.	1	No.	16.00	16	32.85	33	48.85	49
11.30 Latch sets.	7	sets	8.25	58	13.77	96	22.02	154
11.40 Bathroom privacy latch sets.	3	sets	8.25	25	15.89	48	24.14	72
11.60 Door stops.	11	No.	2.02	22	1.75	19	3.77	41
SUBTOTAL - HARDWARE	2.72	/m2 GFA		153		258		411

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.08	1,950	2.18	1,380	5.26	3,330
13.40 Finish to ceilings - textured.	138	m2	1.37	189	1.17	161	2.54	351
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.80	136	4.49	763	5.29	899
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.14	101	6.28	559	7.42	660
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.26	67	0.32	83	0.58	150
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.26	18	0.24	16	0.50	34
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.67	46	2.30	156	2.97	202
SUBTOTAL - WALLBOARD	37.26	/m2 GFA		2,507		3,119		5,626

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.04	127	12.25	257	18.29	384
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.60	382	25.97	2,753	29.57	3,134
SUBTOTAL - FLOORING	23.30	/m2 GFA		508		3,010		3,518
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	4.32	35	1.22	10	5.54	44
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	64.00	64	20.28	20	84.28	84
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	4.32	91	1.22	26	5.54	116
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.24	1,010	0.69	311	2.93	1,321
15.30 Two coats semigloss on internal doors and frames.	10	No.	24.00	240	5.78	58	29.78	298

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	30.00	210	7.52	53	37.52	263
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.90	174	0.23	44	1.13	218
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	0.90	4	0.23	1	1.13	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	2.80	6	1.20	2	4.00	8
15.43 Stain finish to cedar deck.	14	m2	3.18	45	0.94	13	4.12	58
15.44 Stain finish to deck handrail and balustrade.	16	m	5.11	82	1.70	27	6.81	109
SUBTOTAL - PAINTING	16.72	/m2 GFA		1,959		565		2,524
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	3.42	68	6.21	124	9.63	193
16.20 Vanities and base cabinets.	7	m	33.50	235	405.00	2,835	438.50	3,070
16.21 Kitchen wall cabinets.	4	m	33.50	134	227.00	908	260.50	1,042
SUBTOTAL - FITTINGS	28.50	/m2 GFA		437		3,867		4,304

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	5.75	52	9.25	83	15.00	135
17.20 Medicine cabinets	2	No.	11.50	23	61.90	124	73.40	147
17.25 Mirrors	2	No.	11.50	23	78.75	158	90.25	181
17.30 25 mm dia. chrome shower curtain rods.	2	No.	6.25	13	6.81	14	13.06	26
17.40 Mail box and house numbers	1	set	6.25	6	31.48	31	37.73	38
17.50 18 mm dia. chrome coat rods.	6	No.	3.50	21	5.05	30	8.55	51
SUBTOTAL - SPECIALTIES	3.83	/m2 GFA		138		440		578
18. APPLIANCES								
18.10 Range hood	1	No.	16.75	17	110.00	110	126.75	127
SUBTOTAL - APPLIANCES	0.84	/m2 GFA		17		110		127

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING								
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	1,920.00	1,920	3,610.00	3,610	5,530.00	5,530
SUBTOTAL - PLUMBING	36.62	/m2 GFA		1,920		3,610		5,530
20. HEATING								
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1	house	710.00	710	2,125.00	2.125	2,835.00	2,835
SUBTOTAL - HEATING	18.77	/m2 GFA		710		2.125		2,835

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

LLOYDMINSTER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL							
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1 house	0.00	0	950.00	950	950.00	950
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1 house	1,210.00	1,210	1,780.00	1,780	2,990.00	2,990
SUBTOTAL - ELECTRICAL	26.09 /m2 GFA		1,210		2,730		3,940
22. SITE OVERHEAD							
22.10 Site Overhead (Allowance)	1 house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42 /m2 GFA		0		5,500		5,500
TOTAL - LLOYDMINSTER	522.99 /m2 GFA		$20,876		$58,096		$78,972

DETAILED COST ESTIMATES FOR PEACE RIVER

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1. EXCAVATION								
1.10 Excavate for basement, wall footings, and bases.	297	m3	0.65	193	1.09	324	1.74	517
1.11 Excavate trench for garage grade beam.	4	m3	4.35	17	7.25	29	11.60	46
1.20 Backfill to basement walls, footings, and grade beams.	74	m3	0.96	71	1.13	84	2.09	155
1.30 150 mm gravel or sand bed under slab on grade.	25	m3	3.47	87	12.28	307	15.75	394
1.40 4 Mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.03	169	0.33	54	1.36	223
1.50 Remove surplus excavated material off site.	223	m3	0.00	0	8.36	1,864	8.36	1,864
SUBTOTAL - EXCAVATION	21.19	/m2 GFA		537		2,662		3,199
2. CONCRETE								
2.10 20 MPa concrete in footings,bases and basement walls (material only) 200 mm reinforced concrete wall, 200 x 450 mm reinforced concrete footing.	19	m3	0.00	0	106.81	2,029	106.81	2,029

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.15	20 Mpa concrete in grade beams.	1	m3	0.00	0	106.81	107	106.81	107
2.16	300 Dia. reinforced concrete piles. - 2.00 m deep 8 No. - 1.50 m deep 5 No. - 1.22 m deep 8 No.	21	No.	16.80	353	32.20	676	49.00	1,029
2.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.84	219	0.84	219
2.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.84	30	0.84	30
2.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.36	101	1.36	101
2.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	26.13	1,045	12.57	503	38.70	1,548
2.35	Form, place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.20	239	5.05	131	14.25	371
2.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.78	340	7.80	702	11.58	1,042
2.45	100 mm concrete (25 Mpa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.77	353	11.52	852	16.29	1,205

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No	25.25	25	225.00	225	250.25	250
2.60	Parging to concrete walls.	10	m2	9.95	100	4.45	45	14.40	144
2.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4m wide including laminated cedar mantle.	1	No.	672.00	672	1,745.00	1,745	2,417.00	2,417
	SUBTOTAL - CONCRETE	69.49	/m2 GFA		3,127		7,366		10,493
3.	DAMPROOFING								
3.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.40	51	0.39	50	0.79	100
3.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	6.62	298	4.61	207	11.23	505
	SUBTOTAL - DAMPROOFING	4.01	/m2 GFA		349		257		606

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : ● 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
4. SIDING								
4.10 100 mm vinyl siding including building paper.	149	m2	7.14	1,064	14.62	2,178	21.76	3,242
4.20 Prefinished perforated aluminum soffit.	44	m2	6.39	281	11.02	485	17.41	766
4.30 Prefinished aluminum fascia.	70	m	1.20	84	2.86	200	4.06	284
4.40 Brick facing to front elevation.	20	m2	50.68	1,014	45.51	910	96.19	1,924
SUBTOTAL - SIDING	41.17	/m2 GFA		2,443		3,774		6,217
5. ROOFING								
5.10 Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.33	419	4.90	882	7.23	1,301
5.20 Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.94	194	5.13	513	5.76	576
SUBTOTAL - ROOFING	13.30	/m2 GFA		613		1,395		2,008

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6. CARPENTRY (ROUGH)									
6.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38 x 235 mm) with (38 x 38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	447.04	3,755	447.04	3,755
6.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 mm No. 2 grade fir or better.	2.4	MFBM	0.00	0	609.10	1,462	609.10	1,462
6.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	9.06	3,189	9.06	3,189
6.35	Material only - 8mm "Sturdiboard" wall sheathing.	169	m2	0.00	0	5.94	1,004	5.94	1,004
6.40	Labour Only - complete house framing including trusses and window installation.	151	m2	30.07	4,541	0.00	0	30.07	4,541
6.50	Batt insulation RSI-1.409(R8) 64 mm thick x 300 mm wide at rim joist.	56	m	0.47	26	0.91	51	1.38	77

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

			Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.		2	No.	8.74	17	15.45	31	24.19	48
6.70	Framing cedar deck 14 m2 including 702bf of material, 16 m of handrail and balustrade 1.20 m high, and support posts.		1	No.	520.00	520	643.00	643	1,163.00	1,163
	SUBTOTAL - CARPENTRY (ROUGH)		100.92	/m2 GFA		5,104		10,135		15,239
7.	CARPENTRY (FINISH)									
7.10	Stair - 6 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	5 m								
	6.4 mm fir plywood in risers	6 m	1	No.	89.00	89	67.00	67	156.00	156
7.11	Stair - 8 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	7 m								
	6.4 mm fir plywood in risers	8 m	1	No.	91.00	91	85.00	85	176.00	176
7.15	Stair - 9 risers									
	38 x 235 mm stringers	4 m								
	38 x 235 mm treads	8 m								
	6.4 mm fir plywood in risers	9 m	1	No.	92.00	92	98.00	98	190.00	190
7.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.		4	m	4.75	19	8.65	35	13.40	54

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

		Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	62.00	124	131.00	262	193.00	386
7.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm) - windows 44 m - doors 144 m - base 173 m	361	m	1.68	606	1.29	466	2.97	1,072
7.40	Attic access hatch. - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	29.50	59	41.16	82	70.66	141
	SUBTOTAL - CARPENTRY (FINISH)	14.40	/m2 GFA		1,080		1,095		2,175
8.	WINDOWS AND GLAZING								
8.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	652.00	652	652.00	652
8.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	281.00	1,686	265.00	1,590
	- 900 x 1550 mm	2	No.	0.00	0	340.00	680	320.00	640
	SUBTOTAL - WINDOWS AND GLAZING	19.99	/m2 GFA		0		3,018		3,018

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9. SEALANTS								
9.10 Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.25	27	0.14	15	0.39	43
9.20 Caulk (interior) - fibreglass tub/ shower unit.	15	m	1.22	18	0.61	9	1.83	27
SUBTOTAL - SEALANTS	0.46	/m2 GFA		46		24		70
10. Doors								
10.10 Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	27.30	27	350.00	350	377.30	377
Exterior - Insulated, flat slab, metal garage entry door 813x2085x35 mm including paint grade fir frame.	1	No.	27.30	27	190.00	190	217.30	217
Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35 mm .	1	No.	70.35	70	1,115.00	1,115	1,185.35	1,185
Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	121.00	121	658.00	658	779.00	779

1989 ALBERTA HOUSE COST COMPARISON STUDY   SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA :   151 m2

PEACE RIVER   CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10.20 Interior - Hollow core door and frame, rotary cut, mahogany face								
- 450 x 2080 mm	1	No.	14.20	14	50.25	50	64.45	64
- 711 x 2080 mm	3	No.	14.20	43	50.25	151	64.45	193
- 762 x 2080 mm	6	No.	14.20	85	50.25	302	64.45	387
10.30 Mahogany faced bi-fold closet doors complete with hardware.								
- 762 x 2080 mm	1	No.	12.10	12	48.45	48	60.55	61
- 1220 x 2080 mm	3	No.	12.10	36	84.05	252	96.15	288
- 1320 x 2080 mm	1	No.	12.10	12	90.35	90	102.45	102
- 1524 x 2080 mm	1	No.	12.10	12	96.90	97	109.00	109
- 1830 x 2080 mm	1	No.	12.10	12	112.61	113	124.71	125
SUBTOTAL - DOORS	25.75	/m2 GFA		473		3,416		3,889
11. HARDWARE								
11.10 Lock sets to exterior doors.	2	sets	18.40	37	31.10	62	49.50	99
11.20 Security deadbolt.	1	No.	18.40	18	33.20	33	51.60	52
11.30 Latch sets.	7	sets	9.20	64	13.91	97	23.11	162
11.40 Bathroom privacy latch sets.	3	sets	9.20	28	16.10	48	25.30	76
11.60 Door stops.	11	No.	2.20	24	1.77	19	3.97	44
SUBTOTAL - HARDWARE	2.86	/m2 GFA		171		261		432

12. Ceramic Tile NA (included in plumbing).

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
13. WALLBOARD								
13.10 Gypsum wallboard (13mm standard) on walls, ceiling and around stair opgs, including corner bead, taped and sanded - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.12	1,975	2.74	1,734	5.86	3,709
13.40 Finish to ceilings - textured.	138	m2	1.51	208	1.47	203	2.98	411
13.50 Batt insulation RSI - 3.5 (R20) to walls.	170	m2	0.97	165	4.20	714	5.17	879
13.60 (R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.62	144	7.51	668	9.13	813
13.70 4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.37	96	0.33	85	0.70	181
13.75 2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.37	25	0.25	17	0.62	42
13.80 Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.79	54	2.20	150	2.99	203
SUBTOTAL - WALLBOARD	41.32 /m2 GFA			2,667		3,572		6,239

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14. FLOORING								
14.10 Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.79	143	13.04	274	19.83	416
14.20 32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	3.87	410	29.65	3,143	33.52	3,553
SUBTOTAL - FLOORING	26.29	/m2 GFA		553		3,417		3,970
15. PAINTING								
15.10 Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	5.54	44	1.31	10	6.85	55
15.11 Exterior work - Prepare, prime, and paint 4860 x 2130 mm garage door and frame.	1	No.	73.50	74	22.65	23	96.15	96
15.15 Interior work - Prepare, prime two coats of enamel paint on windows, doors, and trim.	21	m2	5.54	116	1.31	28	6.85	144
15.20 Interior work - Prepare, prime two coats of latex or semigloss paint to drywall, etc.	451	m2	2.36	1,064	0.72	325	3.08	1,389
15.30 Two coats semigloss on internal doors and frames.	10	No.	28.50	285	6.32	63	34.82	348

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15.35 Two coats semigloss on bi-fold doors.	7	No.	36.50	256	8.21	57	44.71	313
15.40 Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.00	193	0.26	50	1.26	243
15.41 Prepare, prime, one coat semigloss on handrails.	4	m	1.00	4	0.26	1	1.26	5
15.42 Prepare, prime, one coat semigloss on balustrade.	2	m	3.23	6	1.20	2	4.43	9
15.43 Stain finish to cedar deck.	14	m2	3.54	50	0.83	12	4.37	61
15.44 Stain finish to deck handrail and balustrade.	16	m	5.57	89	1.70	27	7.27	116
SUBTOTAL - PAINTING	18.40 /m2 GFA			2,181		598		2,779
16. FITTINGS								
16.10 Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.12	82	6.30	126	10.42	208
16.20 Vanities and base cabinets.	7	m	42.00	294	450.00	3,150	492.00	3,444
16.21 Kitchen wall cabinets.	4	m	42.00	168	255.00	1,020	297.00	1,188
SUBTOTAL - FITTINGS	32.05 /m2 GFA			544		4,296		4,840

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17. SPECIALTIES								
17.10 Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.65	60	10.10	91	16.75	151
17.20 Medicine cabinets	2	No.	12.92	26	67.25	135	80.17	160
17.25 Mirrors	2	No.	12.92	26	86.52	173	99.44	199
17.30 25 mm dia. chrome shower curtain rods.	2	No.	7.05	14	7.41	15	14.46	29
17.40 Mail box and house numbers	1	set	7.05	7	34.25	34	41.30	41
17.50 18 mm dia. chrome coat rods.	6	No.	4.36	26	6.28	38	10.64	64
SUBTOTAL - SPECIALTIES	4.26	/m2 GFA		159		485		644
18. APPLIANCES								
18.10 Range hood	1	No.	22.00	22	118.00	118	140.00	140
SUBTOTAL - APPLIANCES	0.93	/m2 GFA		22		118		140

1989 ALBERTA HOUSE COST COMPARISON STUDY SEPTEMBER 1989

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

PEACE RIVER

CONSTRUCTION COST ESTIMATE

	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19. PLUMBING							
19.10 Complete plumbing including : - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1 house	2,485.00	2,485	3,950.00	3,950	6,435.00	6,435
SUBTOTAL - PLUMBING	42.62 /m2 GFA		2,485		3,950		6,435
20. HEATING							
20.10 Gas fired , forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers incl. all ductwork.	1 house	840.00	840	2,490.00	2,490	3,330.00	3,330
SUBTOTAL - HEATING	22.05 /m2 GFA		840		2,490		3,330

SINGLE DETACHED DWELLING - (4-level split)

GROSS FLOOR AREA : 151 m2

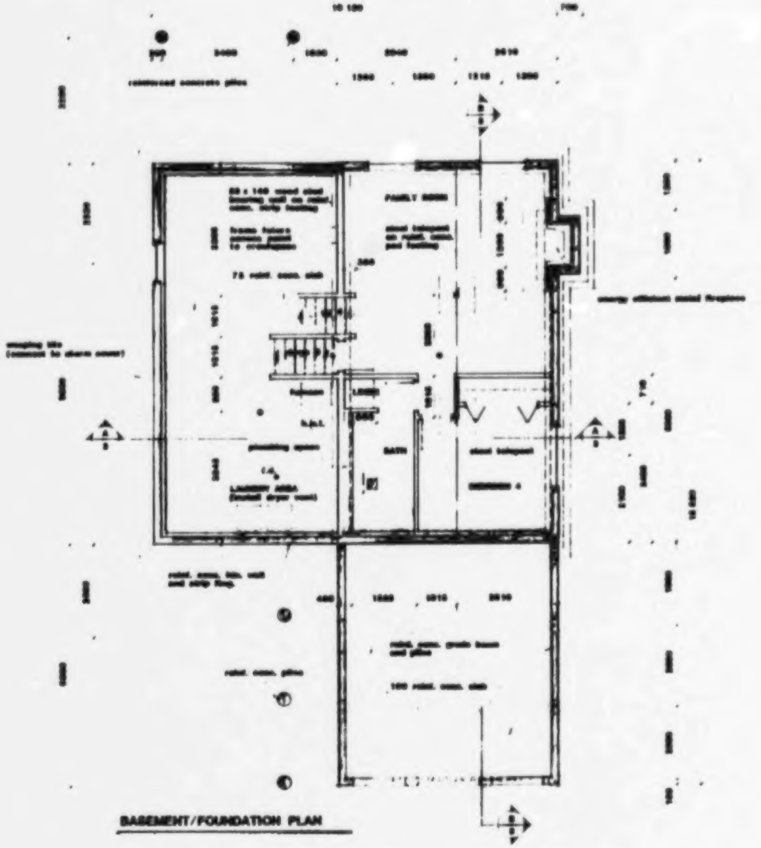
PEACE RIVER

CONSTRUCTION COST ESTIMATE

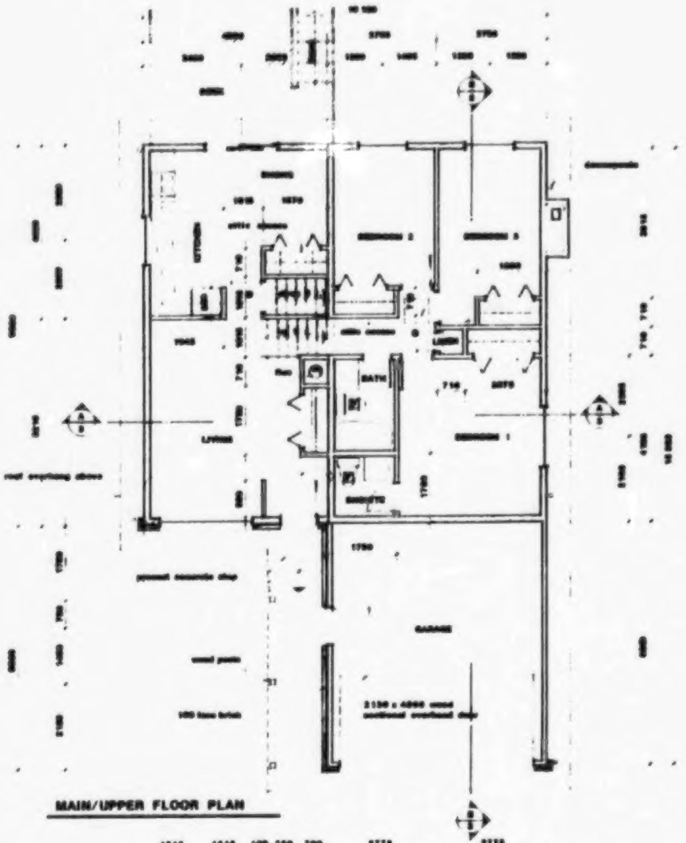
	Quantity Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21. ELECTRICAL							
21.10 Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1 house	0.00	0	1,000.00	1,000	1,000.00	1,000
21.20 Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door-bell with two presses, smoke detectors, 100 Amp.- 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1 house	1,210.00	1,210	1,945.00	1,945	3,155.00	3,155
SUBTOTAL - ELECTRICAL	27.52 /m2 GFA		1,210		2,945		4,155
22. SITE OVERHEAD							
22.10 Site Overhead (Allowance)	1 house	0.00	0	5,500.00	5,500	5,500.00	5,500
SUBTOTAL - SITE OVERHEAD	36.42 /m2 GFA		0		5,500		5,500
TOTAL - PEACE RIVER	565.42 /m2 GFA		$24,604		$60,774		$85,378

APPENDIX

Reduced Drawings : Single-Detached Dwelling


10 180
FAMILY ROOM
BATH
BEDROOM 4
LAUNDRY AREA
2775
2775

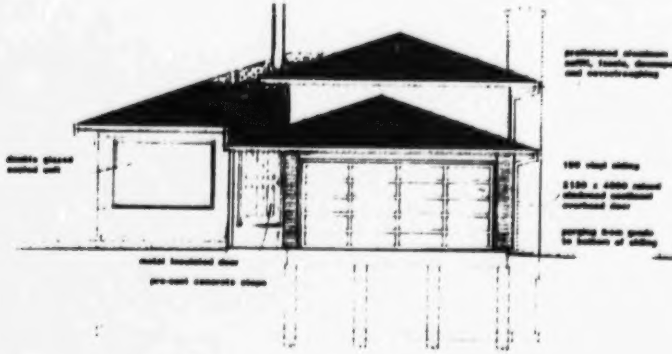
BASEMENT/FOUNDATION PLAN


10 180
DINING
KITCHEN
LIVING
BEDROOM 1
BEDROOM 2
BEDROOM 3
BATH
ENSUITE
LINEN
GARAGE
2775
2775

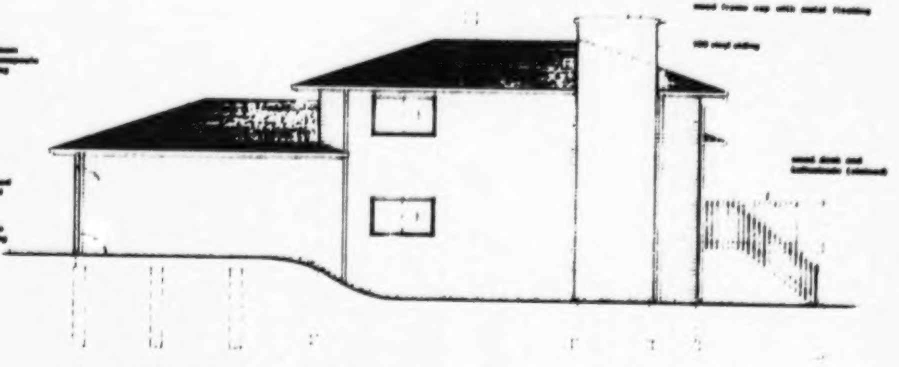
MAIN/UPPER FLOOR PLAN

● smoke detectors to be permanently connected to an electrical circuit

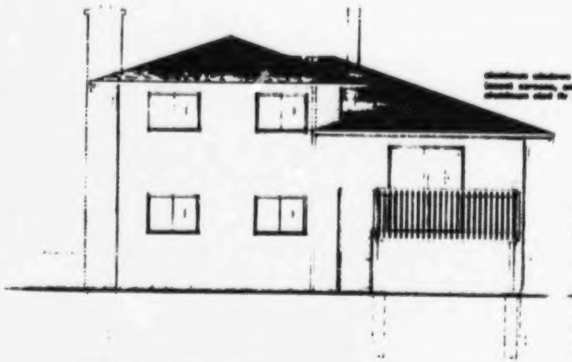
1 OF 3


double glazed sealed unit
100 vinyl siding
metal insulated door
pre-cast concrete steps

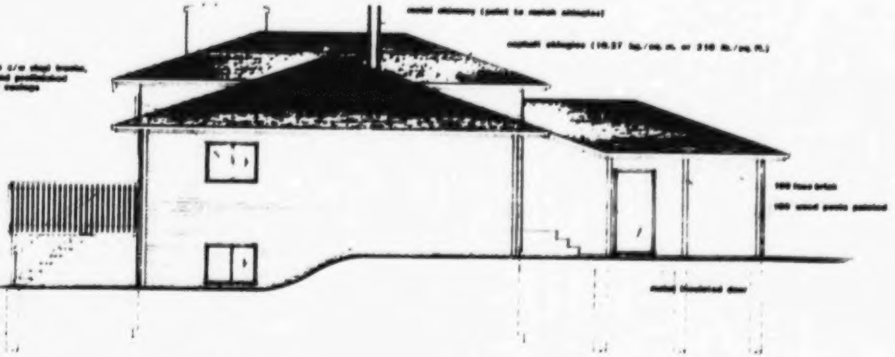
FRONT ELEVATION


wood frame cap with metal flashing
100 vinyl siding

RIGHT SIDE ELEVATION

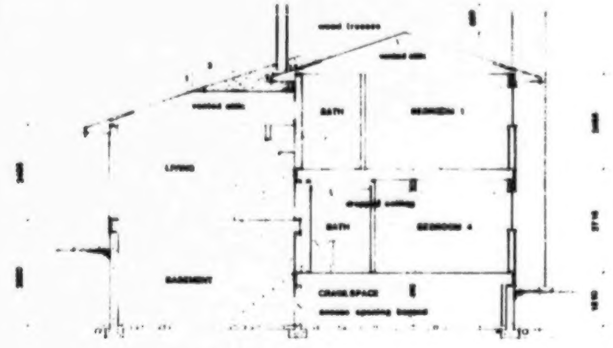


BACK ELEVATION

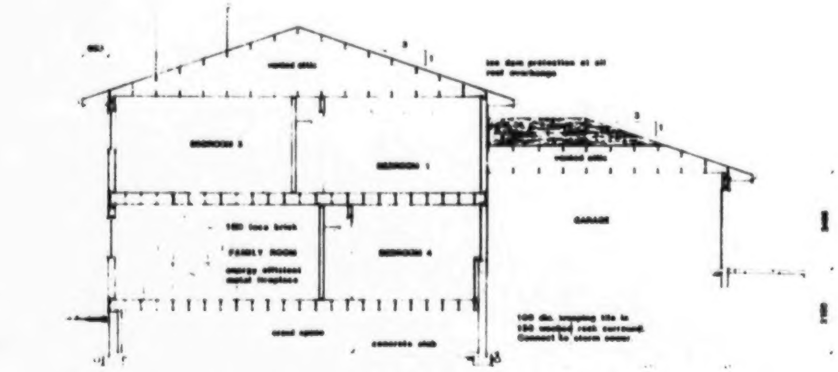

metal chimney (paint to match shingles)
100 face brick
100 wood posts painted
metal insulated door

LEFT SIDE ELEVATION

2 OF 3


wood trusses
vented attic
vented attic
BATH
BEDROOM 1
LIVING
dropped ceiling
BATH
BEDROOM 4
BASEMENT
CRAWLSPACE
2716
1810

A-A BUILDING CROSS SECTION
3


vented attic
ice dam protection at all roof overhangs
vented attic
BEDROOM 3
BEDROOM 1
100 face brick
FAMILY ROOM
energy efficient metal fireplace
BEDROOM 4
GARAGE
crawl space
concrete slab
100 dia. weeping tile in 150 crushed rock surround. Connect to storm sewer

B-B BUILDING CROSS SECTION
3

SPECIFICATIONS

FOUNDATIONS

- 20 Mpa, type 50 concrete in 450 x 200 reinforced concrete footings
- 20 Mpa, type 50 concrete in 200mm cp concrete foundation walls c/w 4 rows of #10 rebar
- 20 Mpa concrete basement floor slab 75mm thick over 6 mil poly. and 100mm compacted sand
- 100mm reinforced garage floor on compacted sand
- 300mm dia. reinforced concrete piles under garage floor and grade beam
- 100mm dia. weeping tile c/w minimum of 150 crushed gravel surround
- asphalt emulsion spray applied to interior and exterior of foundation

FRAMING

- floor joists 38 X 235 SD spruce at 400mm o.c. and c/w 38 X 38 cross-bridging
- built-up fir beams on adjustable steel posts
- 16mm tongue and groove fir plywood subfloor
- 10mm fir plywood underlay
- exterior walls 38 X 140 SD spruce at 400mm o.c.
- interior partitions 38 X 89 SD spruce at 400mm o.c.
- 8mm "insulboard" wall sheathing
- pre-engineered wood roof trusses
- 10mm spruce plywood roof sheathing

INSULATION/VAPOUR BARRIER/DRYWALL

- exterior walls R20 glass fibre batts
- 4mil poly. vapour barrier sealed at all joints
- ceilings R40 loose fill glass fibre insulation and 4 mil poly. v.b.
- 12mm gypsum wallboard throughout

EXTERIOR FINISHES

(see building elevations on drawing no. 2)

DOORS AND WINDOWS

- metal insulated front door
- 1800 wide aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings
- hollow core interior doors (rotary cut mahogany), stained
- mahogany faced bi-fold closet doors
- aluminum windows c/w vinyl breaks, insect screens, and prefinished aluminum clad fir casings
- insulated glass sealed unit in living room window
- 4880 wide X 2130 high steel sectional overhead garage door (painted)

INTERIOR FINISHES

- ceramic tile to bath surround
- texture finish to ceilings
- sheet vinyl flooring to bathrooms, kitchen and dining area
- 32oz., 100% nylon carpet with [illegible] foam underlay
- paint to walls; latex semi-gloss (washrooms, kitchen, dining area)
- upgraded baseboards and trim

FITTINGS

- douglas fir plywood shelving with hardwood edging
- bathroom vanity (solid wood)
- kitchen overhead and base cabinets (solid wood)
- hemlock wood railing c/w spindles, railing caps, and newel posts

SPECIALTIES

- all washroom accessories including full-size mirrors
- medicine cabinets
- 25mm dia. metal closet curtain rods
- mailbox and house numbers
- range hood
- energy efficient 915mm fireplace c/w fan
- upgraded hardware throughout

PLUMBING AND HEATING

- stainless steel double kitchen sink
- vanity sinks
- water closets
- fibreglass tub/shower units
- dishwasher rough-in
- 3 piece bath on third level
- washer standpipe
- 2 hosebibs
- 33 Imp. gallon (152 litres) water heater (gas fired)
- gas fired, forced air furnace c/w humidifier

ELECTRICAL

- 100 amp, 32 breaker electrical service
- 220 volt electrical service to dryer and range locations
- valances c/w fluorescent lighting fixture in main bath
- GFI protected plugs in bathrooms
- 2 exterior weatherproof wall plugs
- dishwasher rough-in
- 3 telephone locations
- 3 cable locations
- smoke detectors
- electrical wiring for future garage door opener
- range hood installation
- bathroom fans
- upgraded lighting package
- roughed-in central vacuum system

3 OF 3